



The Actuarial Review

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From the President

Continuing Education



by Patrick J. Grannan

“Your billable time determines your income. Your non-billable time determines your future.”

This observation was made by David Maister, an authority on the management of professional service firms. It is a worthwhile observation for any professional to keep in mind. For those who are not consultants, “billable time” translates to the work you are currently paid to do. “Non-billable time” includes the time you invest in developing skills that will help you be successful in the future. I hasten to add that success is defined by the individual and is certainly not limited to compensation.

The CAS provides continuing education opportunities ranging from special interest seminars on relatively narrow topics to broader seminars such as the CLRS and the Ratemaking Seminar, and the CAS Spring and Annual Meetings, which offer wide varieties of topics. Many additional continuing education programs are available from other sources, including several CAS Regional Affiliates.

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The WTC Collapses

Terrorist Attacks Claim Life of CAS Member

by Elizabeth Smith

In the days following the terrorist attacks of September 11, 2001, the CAS was unable to account for one of its members, **Philip D. Miller**. Miller was one of 4,815 listed as missing from the attacks on the World Trade Center (WTC) Twin Towers. Miller, who worked on the 102nd floor of Tower Two for Aon Risk Consultants, reportedly phoned his wife to tell her that he and other coworkers were evacuating the building but was not heard from again. (See page 5 for a tribute to Miller.)

A 1975 Fellow, Miller had only been with Aon a few months, working as a principal and consulting actuary. For several years prior to moving to Aon, Miller spent a majority → page 20

Ross Wins President-Elect; Conger to Become President

ARLINGTON, Va.—In the first CAS competitive election in recent years, **Gail M. Ross** won over **Sholom Feldblum** to become CAS president-elect. Out of a total 1,274 votes cast, Ross won with 696 votes (55%). Feldblum garnered 578 votes (45%). Ross will take on the position at the close of the 2001 CAS Annual Meeting in Atlanta, Georgia this month, when **Robert F. Conger** officially succeeds **Patrick J. Grannan** as CAS president.



Robert F. Conger

Gail M. Ross

Balloting for the 2001 CAS election closed on October 1, 2001. CAS tellers verified the election results on October 4, 2001. A total of → page 3

Carlson and Schultz Elected to Executive Council

ARLINGTON, Va.—During its September 13 meeting, conducted via conference call, the CAS Board of Directors voted to elect **Christopher S. Carlson** as vice president—programs & communications and **Roger A. Schultz** as vice president—continuing education. Carlson succeeds **David R. Chernick** and Schultz takes over for **Abbe S. Bensimon**. Both Chernick and Bensimon completed three-year terms on the Executive Council.

Carlson received his CAS Fellowship in 1990 and

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Reflections on September 11

by Walter C. Wright

September 11, 2001, began as a perfect day. The morning was beautiful in New York City—warm, clear blue skies without a cloud in sight, a slight breeze. Hundreds of thousands of workers poured into downtown Manhattan by subway, bus, PATH, train, car, and foot, rejoicing in the glorious late summer weather. And thousands of us went to our offices in the World Trade Center Towers. We were beginning a normal Tuesday.

By the nature of our profession, we spend time working with the financial impacts of all kinds of disasters: earthquakes, hurricanes, industrial accidents, medical malpractice, automobile accidents, fires, and so forth. The language of our trade—catastrophe coverage, clash covers, limits of liability, excess of loss, adverse development—is a technical jargon that insulates us from the underlying human suffering that is represented. We work with the numbers, simplifying human tragedy to the status of claim frequency and average severity.

“That remoteness, the separation between our lives and the ‘numbers,’ ended at 8:47 a.m. on September 11.”

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Many CAS members worked in the Twin Towers and felt the explosion when the first plane hit the north tower. We then suffered, with the rest of the nation, as this act of terrorism expanded to include the south tower, the Pentagon, and United Airlines Flight 93 crashing down in southwestern Pennsylvania. As a professional organization, we are very fortunate that so many of us physically escaped. But we have all been touched by this tragedy—some directly, by the loss of loved ones, close friends, and business associates, and others less directly, by the knowledge that thousands were killed in this act of terrorism.

In the aftermath of the tragedy we have witnessed the best in humanity:

- the heroism of the firefighters and other rescue workers;
- the mutual support of the tens of thousands of workers—of all nationalities, religions, and ethnic groups—who vacated lower Manhattan;
- the outpouring of love for the many missing;
- the selflessness of the volunteers who have worked so long at ground zero;
- broad support from the community to help in any way possible with families who had lost members and with others who were suffering from the tragedy.

This has been a potent reminder that human nature has the capacity for enormous good as well as evil.

Our lives will be changed by the events of September 11 in many ways. We will never again be so comfortable, either at home or abroad. This will lead to many small adjustments at a personal level, combining to represent major changes across our society—we are already experiencing the effects on the travel industry.

As we begin to rebuild our businesses and our lives, we should not forget the terrible events of September 11. But, hopefully, we will each be able to remember the goodness that was also revealed, and will make personal efforts to increase the joy that does, in fact, still exist in the world. We had an unforgettable reminder that each day could be our last, so let's make each day as good as we can, for ourselves and for others, as we move ahead. ■



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Head to the Waterside for the 2002 Ratemaking Seminar

by **Klayton Southwood**, Member, Committee on the Ratemaking Seminar

The 2002 Ratemaking Seminar will be held at the Tampa Marriott Waterside in Tampa, Florida (pictured right) on March 6-8, 2002. The program, the venue, and the Wednesday through Friday format should make for the best Ratemaking Seminar ever! Promotional materials and information on the seminar will be available at the beginning of next year.

The general session will focus on some insurance implications of the tragic events of September 11, 2001. Concurrent sessions will include an introductory track covering standard ratemaking procedures for personal lines coverages, plus advanced sessions on data management; financial and dynamic financial analysis; workers compensation; commercial lines; personal lines; and property, regulatory, and reinsurance issues. Call papers from the Ratemaking and Data Management Research Committees will be presented.

Many topics will be featured, such as the costs of bad data, privacy issues, stochastic ratemaking techniques, pricing excess workers compensation, workers compensation residual market/state fund issues, captive pricing, changes in homeowners classification and rating variables, and professionalism. Look for information via the CAS Web Site (www.casact.org) and in the mail in late December or early January. ■



Photo Credit: Tampa Marriott Waterside



Fourth Edition *Foundations* Textbook Now Available

Make room on your bookshelves for *Foundations of Casualty Actuarial Science*, now available from the Casualty Actuarial Society. This fourth edition of the CAS Textbook takes an introductory approach to basic actuarial concepts and is a beneficial addition to any student or academic's library.

The new edition was first envisioned in 1998 by a task force charged with evaluating the third edition and recommending changes for a fourth. The

Textbook Rewriting Committee, consisting of Chairperson **Robert Lowe**, **Stephen D'Arcy**, **Steven Groeschen**, **Farrokh Guiahi**, **Donna Munt**, and **Rial Simons**, was instrumental in implementing the recommendations of the task force, including the refashioning of all chapters to an introductory level. A new chapter on risk theory was added to the fourth edition to cover more thoroughly a topic previously addressed as a chapter section.

The textbook has an impressive list of authors, many of whom also con-

tributed to the first edition: **Jo Ellen Cockley**, **Stephen D'Arcy**, **Curtis Gary Dean**, **Sholom Feldblum**, **Robert Finger**, **Andrea Gardner**, **Richard Gorvett**, **Howard Mahler**, **Charles McClenahan**, **Gary Patrik**, **Margaret Tiller Sherwood**, **John Tedeschi**, **Kimberley Ward**, and **Ronald Wiser**.

The *Foundations of Casualty Actuarial Science*, Fourth Edition, can be purchased from the CAS for \$75. Visit the CAS Web Site (www.casact.org) and click on "Publications" to find a downloadable order form. ■

Election results

From page 1

1,279 Fellows, or 58.3 percent of the CAS Fellows, voted in this year's election, compared to 39.7 percent of the Fellows voting in the 2000 election.

CAS Fellows also elected new CAS Board of Directors. They are **Phillip N. Ben-Zvi**, **Curtis Gary Dean**, **David G. Hartman**, and **Janet R. Nelson**. These Fellows will also assume their new positions at the close of the 2001 Annual Meeting in Atlanta.

Ross has been a CAS Fellow since 1985 and is currently vice president with Am-Re Consultants, Inc. in Princeton, New Jersey. Ross has served the CAS in various capacities, most recently as member of the CAS Board of Directors, a position she has held since 1998. Ross has worked on the Syllabus Committee since 1986, serving as vice chair (1994-1995) and chair (1995-1999). Other CAS work includes chair of the Education Consultant Task Force, member of the Board Task Force on Exams 3 and 4, and member of In-

ternational Issues and Education Policy Committees.

The new directors will serve three-year terms. They succeed **Charles A. Bryan**, **John J. Kollar**, Ross, and **Michael L. Toothman**. As the most recent past president, Grannan will serve as chairperson for the CAS Board of Directors during 2002. Members of the CAS Nominating Committee for the 2001 CAS elections were Chairperson **Mavis A. Walters**, **Robert A. Anker**, **Albert J. Beer**, **Alice H. Gannon**, and **Steven G. Lehmann**. ■

From the President

From page 1

Precept 2 of the Code of Professional Conduct says, "An Actuary shall perform Actuarial Services only when the Actuary is qualified to do so on the basis of basic and continuing education and experience and only when the Actuary satisfies applicable qualification standards." When working in the U.S., for example, the Academy's Qualification Standards apply. Those standards require a minimum of 12 credit hours of continuing education per year on average for actuaries who issue "prescribed statements of actuarial opinion, (PSAO)" such as statutory statements of actuarial opinion on loss reserves. Most practicing actuaries, including those who do not issue PSAOs, should want to spend more than 12 hours per year keeping up to date and expanding their skills, although much of that time

would not necessarily be spent in formal continuing education activities such as seminars.

There have been discussions recently in some CAS and Academy committees about the possibility of expanding the qualification standards by broadening the work to which they apply or by increasing the number of hours required. No change of this type would be made without substantial opportunity for discussion and input by the membership.

The primary reasons for considering changes of this type are to improve the image of the profession and to fulfill the CAS statement of purpose better, which says the CAS will (among other functions) "establish and maintain standards of qualification for membership" and "promote and maintain high standards of conduct and competence for the members." Other professions have significantly higher require-

ments than 12 hours and appear to find them practical. The primary arguments against expanding our requirements are that we should avoid creating any more rules than necessary and that some practical issues may be difficult to address in defining the requirements. One important issue is that many of our members work outside the traditional casualty actuarial practice areas. Some manage businesses and do little or no technical work. Any new requirements would need to take these members' circumstances into account, such as by exempting them or by defining the qualifying continuing education in a way that is relevant to their work.

Regardless of whether the profession's continuing education requirements are expanded, I would strongly encourage any actuary to identify their own requirements—the types and amounts of skill development needed to be successful in the future. ■

Executive Council Election

From page 1

has an extensive background in CAS programs, most notably serving on the Ratemaking Seminar Committee, which he chaired, and the Committee on Ratemaking. Carlson has been actively involved with the latter committee since 1990, serving as vice chairperson (1993-1994) and chairperson (1994-1997). Other CAS activities include serving on the Examination, and Research Policy and Management Committees, as well as the Task Force and Committee on Volunteer Resources.

Schultz is a 1988 CAS Fellow, who currently chairs the Committee on Volunteer Resources. He has been a member of the Committee on Professionalism since 1993, serving as vice chairperson (1995-1996) and chairperson (1996-1999). He was a member of several other committees throughout the 1990's, including Ratemaking Seminar, Syllabus, and Examination. He has also served on two task forces, Volunteer Resources and Membership Survey, and was the liaison to the American Academy of Actuaries Council on Professionalism (1997-1998).

The Board of Directors reelected the five other vice presidents on the 2000-2001 Executive Council for 2001-



Christopher S. Carlson Roger A. Schultz

2002. These vice presidents are **Sheldon Rosenberg** (Administration), **Mary Frances Miller** (Admissions), **LeRoy A. Boison** (International), and **Gary R. Josephson** (Research and Development). ■

CORP-Accepted Papers Posted on Web

The CAS Committee on Review of Papers has released its quarterly update of recently accepted papers. Electronic versions of the accepted papers are located on the CAS Web Site under "Publications." The CAS Editorial Committee will be editing these papers for inclusion in the *Proceedings of the Casualty Actuarial Society*. As of October 15, 2001, CORP has accepted the following papers:

1. "Is the Efficient Frontier Efficient?" by William C. Scheel, William J. Blatcher, Gerald S. Kirschner, and John J. Denman
2. "Smoothed NPML Estimation of the Risk Distribution Underlying Bonus-Malus Systems" by Michel Denuit and Philippe Lambert
3. "Underwriting Cycles and Business Strategies" by Sholom Feldblum ■

One of Our Own

by Theresa W. Bourdon

As the horrific events of September 11 began to unfold, the painful realization hit many of us that we had friends and colleagues who could have been in or near the World Trade Center that morning. According to the CAS, six firms, including insurers, reinsurers, brokers, and consultants employed a total of 36 CAS members with WTC addresses. By Friday, September 14, a letter from CAS President Pat Grannan posted on the CAS Web Site identified only one CAS member who was still missing: **Philip Miller**.

For those of us who knew Phil, the realization that he was among the missing brought overwhelming grief for the great loss to his family, friends and colleagues, and to his profession. For those of you who did not know Phil, similar feelings were likely accompanied by a natural curiosity to know more about Phil Miller. After all, he is one of our own.

By all accounts, Phil should be described as an actuarial student prodigy. By the time he was graduated from City College of New York in 1968 at age 20 he already had two CAS exams under his belt. He began a promising career that same year with the Insurance Rating Board, a predecessor of Insurance Services Office, Inc. (ISO), in its actuarial department in New York City. While at ISO, Phil continued with stellar success on the exam track. In 1970 Phil's first child, Sheryl, was born. Along with the joy of his first born came the distractions and challenges of parenthood, yet Phil remained ever the determined student. According to Phil's wife Arlene, Phil kept to his strict study regimen, taking only one week off between sittings, and using a closet in their small New York apartment as his study space. By May 1975 Phil was a CAS Fellow with a perfect record of passing all exams on the first sitting.

The vigor with which Phil approached actuarial exams also defined his career at ISO. It was clear from the beginning that Phil was going to be on the fast track. He moved up the corpo-

rate ladder the same way he passed exams: from actuarial student, to manager of the commercial automobile actuarial division, to ISO's first data quality officer, to vice president of data management and control, to senior vice president and chief actuary, a position he held at the time he left ISO to pursue a career as a consulting actuary.

“Phil never lost his trademark sense of humor, even during the difficult times. He was a friend as well as a mentor and will be sorely missed but never forgotten.”

—Norma Masella

“Phil had the ability to recognize your strengths even before you may have recognized them yourself—and he helped to nurture these strengths,” recalled Rose Reindl, an ISO colleague. “While he remained focused and a classic workaholic, Phil always found the time to laugh and enjoy life. He was easy to talk to and made time to listen. To many of us, Phil was not just our boss or our colleague—he was our friend.”

“Phil was a strong role model for so many of us,” says **Norma Masella**. “He had a keen grasp of both the analytical and business sides of a project. In deciding on a particular course of action, he would weigh alternatives and listen to the opinions of colleagues and support staff. He never dictated—he led. He had a fostering style of management that brought out the best in all of us and guided us during times of crisis. Phil never lost his trademark sense of humor, even during the difficult times. He was a friend as well as a mentor and will be sorely missed but never forgotten.” Commenting on Phil's quick laughter, Masella added, “There were a number of funny episodes that will

go down in the history books—like the time Phil inadvertently checked into a YMCA rather than the hotel where he had reservations. But Phil laughed just as hard as the rest of us at these ‘Phil-isms’—and that speaks volumes of his endearing nature.”

“Phil never really learned how to relax until he was bitten by the golf bug,” recalled **Art Cadornie**, another ISO colleague. “Unlike bus rides, train rides, plane rides, time in the bathroom where he could always do work or read what was going on, on the golf course, he could do nothing but chase the little white ball. I could always count on him to have the first starting time on weekends in the Poconos. We are all better off for knowing him and we will always remember him.”

Phil left ISO in early 1995 to pursue a career as a consultant with Tillinghast-Towers Perrin. “In my interaction with Phil I was impressed with how pleasant and positive he was,” said Tillinghast-Towers Perrin colleague **Ollie Sherman**. “He was very hard working and adept at analysis of unusual exposures. He took a leading role in constructing our model of the potential insurance exposure related to tobacco. He virtually single-handedly prevented the potential devastating consequences of Y2K, through spreading the word on the significant exposure presented by the millennium issue.”

Phil joined Aon in March 2001 as assistant director and actuary in our New York office, returning with sad irony to the WTC where he had worked for ISO when the 1993 terrorist bombing occurred. It didn't take long for those of us at Aon to recognize Phil's strong work ethic, people-oriented disposition, and understated, yet effective, leadership style.

“I have known Phil over the last twenty-five years,” said **Terry Alfuth**. “I first met him at ISO when he was involved with the various committees. We were both much younger then and had similar visions for the future. He

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One of Our Own

From page 5

was a soft-spoken leader and a person you could easily develop a friendship with. I recall many of the bus rides at the CAS meeting evening gatherings where we often talked about the future of the CAS and our individual careers. This spring I was delighted to have a long-time friend join us in our New York Aon office. We worked on many difficult accounts together and we were able to find a bit of humor in them. Phil liked to golf and talk about his summer home and how it was such a peaceful setting. I will miss Phil as one of our Society's true professionals and a dear friend."

"Although I worked with Phil only a short time," reflected **Terry Pfeifer**, "the thing I'll most remember about him was his cheerful demeanor and jovial attitude. It's sometimes difficult

to find something humorous in actuarial work, but Phil often seemed to be able to crack a few jokes and maintain a lighthearted mood. Even when talking to Phil on the phone I always felt he had a sly grin on his face as if he was laughing at his own private joke; or maybe he was just simply happy in working at his job. Phil's voice mail answering message said something like '...please leave a message at the tone. However, if you'd like to speak with a *real* person, please dial 0 to speak with...' When I think of Phil that's how I'll remember him—a real person. A genuine good guy."

I personally recall how Phil loved to talk about his family and the special retreat he and his wife had created in the Poconos Mountains of Pennsylvania to enjoy time together with each other and their son, Danny, who has cerebral palsy. As I remember Phil, my picture of him will forever be the ever-

smiling, tall, yet nonintimidating figure that commanded your attention with his gentle demeanor.

Ever the analytic, Phil was clued in well ahead of the rest of us that dreadful morning, even before the second plane hit his tower only a few floors above where he was last seen. For he is quoted as saying to one of our surviving colleagues during the evacuation, "It's a beautiful clear day in New York City and a plane flies into the World Trade Center—something is not right about this."

Phil gave his life in the line of duty: duty to his family as a provider, duty to his profession as an actuary, duty to his employer as a consultant, and duty to his country as an American citizen supporting life, liberty, and the pursuit of happiness. So for those of you who wanted to know more about our missing colleague, know this—Phil Miller is an American hero. ■

Other Fallen Colleagues

by **Theresa W. Bourdon**

Aon mourns the loss of several colleagues who, although not CAS members, had close ties to the casualty actuarial community.

Howard Kestenbaum, executive vice president in the Actuarial & Analytics Practice of Aon Risk Consultants, Inc., was a 24-year veteran of Aon and its predecessor companies. Howard was graduated from Williams College and earned his masters and Ph.D. in physics from Columbia University. Howard was a well-respected, national leader in serving the analytical needs of the Aon brokerage community and their clients. He was chairman of the Actuarial & Analytics Steering Committee, providing leadership and strategic planning to the practice. Howard was especially well known at Aon for developing and maintaining many of the financial models used by the Aon actuarial, analytical, and brokerage community. A great leader and mentor to all who knew him, Howard was also a special friend to his colleagues. His close as-

sociate at Aon, Judy Wein, says it best, "His guidance, brilliance, warmth, practicality, strength, stability, and 'specialness' will be missed beyond words."

Michael Lomax, was an FIA and executive vice president of Aon Re Services in New York. Michael was a dynamic and widely respected leader within Aon Re and was a credit to the Institute of Actuaries here in the United States. During his tenure at Aon Re Services, he played an instrumental role in the development of our dynamic financial analysis tools. He was also an impressive consultant and held the widespread respect of actuaries at the many clients of Aon Re whom he served tirelessly. In the words of his colleague, **John Aquino**, "Every member of the Aon Re Services team loved Michael dearly." Michael is survived by his wife, **Erica Partosoedarso**.

Vijayashanker Paramsothy, a consultant in the Actuarial & Analytics

Practice of Aon Risk Consultants, was graduated with a BS in actuarial science from the College of Insurance in New York. Vijay joined Aon in January 2000. He received an MBA from the College of Insurance in May 2001. In that same month he also earned his ARM. He had passed three actuarial exams and was continuing his pursuit of the actuarial designation. He was also taking the tests for a CFA (chartered financial analyst). Vijay was one of the most pleasant, bright, and hard working individuals you could have the pleasure to know. He mastered the risk financing models of his unit quickly and soon began enhancing them to be more efficient. His professional career, though unfairly short, was full of accomplishments. A citizen of Malaysia, Vijay had friends and family around the world. His friendly personality and positive outlook on life instantly charmed everyone who came in contact with Vijay. He is dearly missed. ■

No Glass Ceilings? Look Again

by Daniel A. Lowen

Arthur Schwartz's last question ("The State of the Market—Part Two," *The Actuarial Review*, August 2001) reads, "Are there any types of actuaries that face special challenges in getting hired or promoted—specifically, women actuaries, actuaries with minority backgrounds, and actuaries with physical handicaps? Is there a glass ceiling for these actuaries?"

This is a very sensitive topic and needs to be handled with care. I found the three panelists' responses to be rather cavalier, and I would like to articulate my concerns.

First, all three panelists explicitly deny that any glass ceilings cap the career prospects of actuaries from these groups that have traditionally faced job discrimination. While I agree that things are better for them now than ever, it is just not true that these battles are all won. Female actuary friends complain to me about glass ceilings (while acknowledging that the ceilings are higher for them than for women in other professions). A friend in a high place has repeated to me some sexist remarks exchanged in the all-male boardroom of the insurance company he works for. And while I do not have any direct knowledge of the experience of physically handicapped actuaries or ethnic minority actuaries, I can't help

but suspect that some of them face serious problems too.

Second, Milkint's statement that "women actuaries tend to be more loyal to their employer" is disrespectful both to women, by homogenizing them, and to men, by implying disloyalty. Have recruiters compiled data from their clients' résumés to show that women stay with employers longer than men do? And if this is indeed the case, are these women truly motivated by "loyalty?"

Third, and the main point of this letter, where was the mention of gay and lesbian actuaries? I would like to break the silence that so often surrounds the continuing job discrimination we as a group face.

While many employers of actuaries (my own, for example) give us the same opportunities they would give anyone else, many others remain as actively hostile as the law permits. I know of one gay actuary who was fired several years ago a week or so after coming out at the office. Because this happened in one of the 38 states where such discrimination is still legal, he had no recourse. At my former employer, lesbians or gays in executive positions remain strictly closeted, and all three gay actuaries I knew left after a few years, tired of the unfriendly tone from above.

In short, while the situation is much better than it once was, many serious

problems still plague us, and many glass ceilings still apply.

Actuarial job recruiters are in a position to help.

It is of vital importance to lesbian or gay actuaries to know which employers are sensitive to their needs. Recruiters who want to serve them, therefore, need to be able to answer two questions about potential employers:

1. How do employers' Equal Employment Opportunity statements read? About half of the Fortune 500 companies now include sexual orientation on the list of criteria they pledge not to use in employment decisions. I expect a similar fraction among actuarial employers.

2. Do employers offer health benefits to the same-sex partners of their employees? Only about 16 percent of the Fortune 500 provide this benefit.

By gathering this information, recruiters will provide good client service, and a welcome side effect might be that more employers would adopt gay-friendly policies. Should I ever decide to use the services of an actuarial job recruiter, I will be actively looking for one who understands the concerns and challenges facing gay and lesbian actuaries.

Thank you for letting me set the record straight, so to speak. ■

Actuarial Science Positions Available

University of Iowa—Tenure-track assistant professor in actuarial science starting 08/02. Promise for excellence in teaching and creative research; Ph.D.; Fellowship or Associateship in professional actuarial society. Practical actuarial experience plus training in economics and finance desirable. Selection begins 10/15/01 and continues until position is filled. To apply send a CV and three letters of reference to Actuarial Search, Statistics & Actuarial Science, University of Iowa, Iowa City, IA 42242. Web: www.stat.uiowa.edu, e-mail: broffitt@stat.uiowa.edu. Women and minorities encouraged to apply. AA/EOE.

Illinois State University—The Mathematics Department seeks applicants for a tenure-track assistant or associate professor in actuarial science beginning August 16, 2002. A Ph.D. in mathematics, actuarial science, statistics, or an actuarial-science-related area is required. CAS or SOA actuarial certification is desirable, but not required. Pursuit of such a certification is expected. Position will work with the actuarial program director in the administration and service areas, teach courses related to actuarial science, pursue research and professional involvement in actuarial science, and otherwise contribute to the life of the department. Refereed research publications, quality teaching and professional service are required for tenure. Salary is commensurate with qualification and experience. See www.math.ilstu.edu for more information on the Mathematics Department. To apply send an application, CV, official transcripts, and three letters of recommendation to Illinois State University, Actuarial Science Position, Dr. Catherine Konsky, Chairperson, Department of Mathematics, Campus Box 4520, Normal, IL 61790-4520; fax (309) 438-5866. For more information on the position contact Dr. Krzysztof Ostaszewski, FSA, CFA, MAAA, Actuarial Program Director, krzysio@ilstu.edu, or consult the program Web site (www.math.ilstu.edu/krzysio/actprog.html); phone: (309) 438-7226. To assure full consideration, application materials should be received by December 23, 2001. However, later submissions may be considered if the position remains unfilled. Illinois State University is an Equal Opportunity/Affirmative Action employer encouraging diversity. ■

A United Profession Makes Sense

by Clive L. Keatinge

In this article, I argue for creation of a new actuarial organization to replace both the CAS and SOA. Under my proposal, each practice area, including casualty, would have a separate internal governance board. Such a structure has worked well in the United Kingdom and Australia to protect the interests of casualty actuaries. The idea is not new, but I believe the time has come to examine the issue once again. My proposal would not greatly change the lives of CAS members. Still, there are several reasons why I believe such a change is the right move today.

Under the current organizational structure, there is little opportunity for interaction between actuaries from the casualty practice area and other practice areas. In a combined organization, perhaps one meeting per year would encompass all practice areas. Other meetings and seminars would focus predominantly on a specific practice area, but would probably be attended by actuaries from all of them. Such a plan would maintain the current character of most meetings and seminars, yet allow for regular interaction among actuaries from different practice areas. With the continuing evolution of financial services, such interaction is likely to be increasingly important in the future.

The current basic education systems of the CAS and SOA are not as well coordinated as they could be. For example, there is no fundamental justification for the CAS to test investment topics separately from the SOA. Cooperation would also have been useful during development of the SOA's innovative Course 7 modeling seminar. A combined organization could easily have designed the seminar to replace an exam in the education of all actuarial candidates. In a combined organization, any differences in educational

requirements would exist because of the practice areas' different needs—not because of organizational inertia or extraneous disagreements. A fully coordinated education system would provide maximum career flexibility and conserve educational resources.

Several years ago, the SOA invited the CAS to cosponsor the *North American Actuarial Journal*. The CAS declined because it viewed this journal as a threat to the *Proceedings*. As a result, most CAS members pay little attention to the *North American Actuarial Journal*, and the *Proceedings* receives little attention outside the CAS. This situation is unfortunate, since both journals contain articles of interest to both CAS and non-CAS members. In a combined organization, we could restructure our refereed journals to expose articles to all readers who might have an interest in them, regardless of practice area.

In this era of globalization, international relations are more important than ever before. Joint ventures with foreign actuarial organizations in basic education are likely to emerge, and joint ventures in continuing education are likely to become more common. In a combined organization, relations with foreign organizations would be easier, since no other country has a separate organization for casualty actuaries.

Finally, obvious administrative savings would accrue from combining the CAS and SOA into one organization. The new organization could consolidate operations, and volunteers would not have to spend precious time coordinating the activities of two different organizations.

I suggest that the CAS Board of Directors and SOA Board of Governors jointly appoint a blue-ribbon panel consisting of an equal number of former CAS and SOA presidents. The two organizations would charge the panel with proposing a governance structure

for a new organization. The panel could consult with whomever it wished in its effort to find a solution acceptable to both CAS and SOA members.

Over its long history, the CAS has served its members very well. However, the organization must now consider the question of what makes sense for the future. I believe a united actuarial profession in the United States and Canada would best serve the needs of all actuaries as we move forward into the twenty-first century. The SOA's new president, W. James MacGinnitie, is a former CAS president. What better time than now to begin work on this bold initiative? I invite your comments. ■

CAS Continuing Education Calendar

Bookmark the online calendar at www.casact.org/calendar/calendar.cfm

November 2–19—Online Course on Financial Risk Management, Module 3, CAS Web Site

November 11–14—CAS Annual Meeting, Marriott Marquis, Atlanta, GA

January TBD—Seminar on Loss Distributions,* TBD, Atlanta, GA

February 15–March 5—Online Course on Financial Risk Management, Module 4, CAS Web Site

March 7–8—Seminar on Ratemaking, Tampa Marriott Waterside, Tampa, FL

March 17–22—27th International Congress of Actuaries, Cancún, Mexico

April 15–16—Seminar on Changing Insurance Market, Fairmont Dallas, Dallas, TX

May 19–22—CAS Spring Meeting, Hotel del Coronado, San Diego, CA

* Limited Attendance

Ziegler Chosen as CAS Executive Director

The CAS Search Committee, chaired by President-Elect **Bob Conger**, selected Cynthia R. Ziegler as the new CAS executive director. She will join the CAS Office on November 5 and work with Tim Tinsley until his retirement on December 31.

Ziegler was senior vice president-continuing education and special projects at the CPCU Society in Malvern, Pennsylvania for approximately 12 years. She previously worked for Professional Insurance Agents of New England and Independent Insurance Agents of North Carolina. Ziegler holds a BA degree from Lake Erie College in Ohio and an MBA in management from West Chester University in Pennsylvania.

Ziegler will be introduced to the membership during the CAS Annual Meeting's business session in Atlanta on November 12. ■



Actuaries Abroad

GIRO Conference Proclaimed “Crackin’”

by Paul Klauke

The Institute of Actuaries needed to secure rooms in no less than three hotels to fit in all of the participants in their General Insurance Research Organization (GIRO) conference, which this year was run jointly with the CAS over three days in early October in Glasgow, Scotland. Due to many U.S. companies' travel restrictions, individuals' heavy workloads, and an understandable reluctance to take a plane and leave family in the wake of the wretched events of September 11, many U.S. actuaries who had originally planned to attend did not make the trip.

That was a shame, because, as those who did attend will undoubtedly agree, it was a “crackin’” conference.

Amy Bouska, the first American to take the stage, presented the results of a CEO survey on actuaries and talked about how we can better help our companies. In the CEO's view, the best actuaries understand the insurance world, and know when (and how) to take risks. According to those CEO's surveyed, we should improve our general business skills, give faster responses to management requests, and become more comfortable with operating under uncertainty.

Four actuaries with international experience gave their perspectives on working in different countries. David Sanders (U.K.), to borrow a phrase, described Great Britain as a nation of

shopkeepers (traders), whereas the U.S. is a nation of entrepreneurs (individuals). U.K. law is concerned with what you *can't* do, whereas Napoleonic law in Europe tells you what you *can* do. Differences, though seemingly subtle, must be recognized in order to work effectively in other places. **Lisa Walsh**, a U.S. actuary working in Ireland, gave a good overview of the different actuarial organizations in the U.S. and the training and exam process of the CAS to the mainly non-U.S. audience. Terry Clarke, a U.K. actuary who has worked in the U.S., advised Americans to “have more patience” with those in other countries to “get to know where they're coming from,” and to not express the attitude that “my view is *the* view.” (He admitted that people of his homeland sometimes have *too much* patience.) Stewart Coutts, a British actuary working in Israel, told us there are a little more than 20 property/casualty actuaries working in Israel, where personal relationships are key in doing business. In Israel, there are no guidance notes to help, and actuaries must sign off reserves by law.

CAS President-Elect **Bob Conger** expressed a desire to focus on the positive aspects and reasons for working outside one's home base, rather than the prevailing attitude that “you'd better do it or be left behind.” Bob would like to see actuaries focus on work that

has business value outside of regulatory environments, like DFA, data-mining, and nontraditional occupations. These are areas that Bob said hold the key ingredients for a feast for the intellect and profession. He invited all to “get involved” internationally.

The evenings' social activities were splendid. The gala dinner was held in the Kelvingrove Art Gallery, complete with participatory Scottish dancing and a menu featuring *Haggis wi' Bashed Neeps an' Champit Tatties an' a Wee Drap o' The Cratur*. [Translation: chopped sheep bits stuffed in a sheep's stomach (haggis) with mashed turnips and white potatoes, with a little gravy.] All rose as the haggis was ceremoniously carried into the hall by a contingent with bagpipes and drums. We toasted the haggis with whiskey as the kilted emcee “addressed” the haggis by reciting (from heart) the traditional Robert Burns' poem. He dramatically sliced through the hapless haggis as he came to the lines:

...*His knife see rustic Labour
dight,*

*An' cut you up wi' ready sleight,
Trenching your gushing entails*

bright,

Like only ditch:

And then, o what a glorious sight.

Warm—reekin', rich!

You get the idea.

All in all the conference was very culturally enriching and worthwhile. ■

An Analysis of Exams 3 and 4

by Glenn G. Meyers, General Officer, Examination Committee

Beginning with the May 2000 examinations, Exams 3 and 4 have been offered jointly with the Society of Actuaries. Since their introduction, some have expressed concern that life actuaries have an advantage over casualty actuaries on Exam 3, which covers life contingencies. A second concern that has been raised is that the difficulty and/or amount of material on Exams 3 and 4 makes them challenging to pass through self-study. For the past several years, the CAS has been surveying our candidates about their employment and student status. This article's purpose is to report the survey results related to these two concerns.

First, let me give some basic demographics from the Spring 2001 exams (See Table 1).

Category	Number of Candidates Sitting	
	Exam 3	Exam 4
Full-Time Student	345	144
CAS Worker	166	111
SOA Worker	822	579
Unknown	193	174
Total	1,526	1,008

Exam 3	Percentage of Candidates				
	CAS Worker	SOA Worker	Unknown	Full-Time Student	Total
Spring 2001	33.1%	38.3%	38.3%	59.7%	42.6%
Fall 2000	20.4%	30.9%	30.4%	53.8%	36.1%
Spring 2000	15.2%	29.5%	37.0%	44.1%	31.9%

Exam 3	Percentage of Candidates				
	CAS Worker	SOA Worker	Unknown	Full-Time Student	Total
Spring 2001	—	5.2%	5.2%	26.6%	9.5%
Fall 2000	—	10.5%	10.0%	33.4%	15.6%
Spring 2000	—	14.3%	21.8%	28.9%	16.7%

Exam 4	Percentage of Candidates				
	CAS Worker	SOA Worker	Unknown	Full-Time Student	Total
Spring 2001	35.1%	39.7%	35.6%	54.2%	40.6%
Difference	—	4.6%	0.5%	19.0%	5.4%

Question #1—Do life actuaries have an advantage on Exam 3?

Table 2 provides pass ratios by candidate category.

Table 3 shows the differences between the CAS worker category and the other categories.

These statistics suggest the most significant differences are between the full-time students and everyone else. I believe there are two reasons for this. The first is that classes help students pass exams. The second is that only the very best students will even take Exam 3 while still students.

There are also differences between CAS workers and SOA workers, however, the differences are smaller and they are shrinking. I suggest a reason for this is that there is a higher proportion of SOA workers who are graduates of actuarial science programs. With the advent of joint CAS/SOA Exams 3 and 4, I expect more students will choose to become casualty actuaries in the future.

I also suggest that a reason the differences are shrinking is that the main study aid for those who did not have actuarial science classes is the prior exams. As the prior exams become available as study aids, the playing field is leveled.

It is worth noting that on Exam 4 (See Table 4), where life contingency questions are not a factor, the differences among the groups also exist, but are slightly lower.

Question #2—Can the difference between exam performance of full-time students and workers be

attributed to our new joint exams?

The CAS has kept pass ratio statistics by candidate category for Parts 4A and 4B (See Tables 5 and 6, page 11).

While the results are not uniform, it does appear full-time students have generally outperformed CAS workers

on 4A and 4B. I attribute the observed increase in the difference to the rise in casualty actuarial courses in the various universities. The full-time student phenomenon discussed above does not appear to be a new problem.

The old SOA Flexible Education System gave credit for Part 4B. Since the exam statistics prior to 2000 did not distinguish between life and casualty nonstudents, we had to infer affiliation by seeing if the students have taken other CAS exams. By this measure, it appears SOA students outperformed CAS students. Admittedly, there may be a bias in these statistics since SOA students could choose whether or not to take Part 4B.

In summary, it appears SOA students did have an initial advantage on the new exams. However, these differences are shrinking and I expect them to disappear. A likely explanation for the differences we do see is the long-standing difference between students and workers.

I have always believed the exams should be passable by self-study. Seeing the difference in exam performance between students and workers does not disturb me. It takes time to absorb the material in these exams and students in an actuarial science program have a head start. What would disturb me is to find that almost all who pass come from actuarial science programs. So far this is not the case.

What does disturb me is the low number of CAS workers who are taking the new Exams 3 and 4. By "low" I

"It appears our current debate on Exams 3 and 4 is discouraging CAS workers from taking these exams."

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Data Survey Refines Membership's Information Needs

by Joan Klucarich, Member, CAS Committee on Management Data and Information

In February 2001, the CAS Committee on Management Data and Information conducted an e-mail survey to learn the data management needs of the CAS membership. With the survey results, the committee seeks to enhance its role in providing resources on management data to CAS members. Following are the survey's key findings and the committee's conclusions.

According to the survey results, most casualty actuaries' activities on data are either on the "extraction and manipulation of data" or "assisting in the design of new analytical tools." The members of the committee found it interesting to read about the wide range of "other" responses, including project management, underwriting activities, and information systems. Very few respondents reported spending much

time on privacy or ownership of data. Although the amount of time spent on data management activities seems to be modest, casualty actuaries rated many data management activities to be "important" or of "great importance."

Most casualty actuaries would prefer to further education through papers and seminars rather than textbooks or additional syllabus material. Many suggestions were offered to improve the CAS Online Catalog.

Most casualty actuaries felt that data quality and data reconciliation were either "important" or of "great importance." Relatively few actuaries thought that the CAS should serve as a data repository, but almost two-thirds thought that the CAS should provide assistance by directing inquiries to other sources.

As a result of reviewing the responses to the survey, and based on its

own discussions, the committee reached a number of conclusions. The committee believes that casualty actuaries should have some basic understanding of data quality, data reconciliation, and other key data management issues. While the committee believes that a textbook would become quickly outdated, it concluded that data management should be on the CAS syllabus. Specifically, at a minimum, the syllabus could include the Actuarial Standard of Practice #23 on Data Quality.

The committee appreciates the time and effort taken by the respondents to this survey. We will use this information to improve the services provided in the areas of data management and data quality activities.

Sara Schlenker, Craig Allen, and John Stenmark contributed to this report. ■

Exams 3 and 4

From page 10

mean low in comparison to the number of students who took Parts 4A and 4B. It appears our current debate on

Exams 3 and 4 is discouraging CAS workers from taking these exams. It may take some time to recover from our current strife.

In closing I should state that nothing

I have said above should be taken to mean I favor the status quo. I am quite open to changing our exam system. I just hope the changes we do make are for the right reasons. ■

Table 5

Part 4A	S1995	F1995	S1996	F1996	S1997	F1997	S1998	F1998	S1999	F1999	Total
Full-Time Students											
# of Candidates	60	35	46	15	30	7	24	14	22	17	270
Pass Ratio	30.0%	34.3%	45.7%	33.3%	26.7%	0.0%	62.5%	42.9%	59.1%	58.8%	40.0%
Non-Students											
# of Candidates	388	378	338	348	326	475	404	449	426	384	3916
Pass Ratio	41.0%	32.5%	35.5%	34.5%	35.9%	37.1%	42.3%	25.4%	34.3%	44.8%	36.2%
Pass Ratio Difference	-11.0%	1.8%	10.2%	-1.2%	-9.2%	-37.1%	20.2%	17.5%	24.8%	14.0%	3.8%

Table 6

Part 4B	S1995	F1995	S1996	F1996	S1997	F1997	S1998	F1998	S1999	F1999	Total
Full-Time Students											
# of Candidates	151	78	98	28	116	14	135	51	152	67	890
Pass Ratio	38.4%	24.4%	28.6%	42.9%	48.3%	28.6%	51.9%	43.1%	42.1%	56.7%	41.7%
Non-Students with Other CAS Credit											
# of Candidates	418	413	424	376	323	444	339	450	427	467	4081
Pass Ratio	31.6%	27.4%	37.3%	40.2%	33.1%	19.4%	28.3%	27.3%	30.0%	34.3%	30.7%
Student/CAS Difference	6.8%	-3.0%	-8.7%	2.7%	15.2%	9.2%	23.5%	15.8%	12.1%	22.5%	11.0%
Non-Students without Other CAS Credit											
# of Candidates	331	227	308	318	308	494	465	551	621	654	4277
Pass Ratio	39.6%	38.3%	46.1%	57.6%	35.4%	32.0%	36.8%	29.4%	36.9%	43.0%	38.6%
SOA/CAS Difference	8.0%	11.0%	8.8%	17.4%	2.3%	12.6%	8.5%	2.1%	6.9%	8.7%	7.9%
Student/SOA Difference	-1.2%	-14.0%	-17.5%	-14.7%	12.9%	-3.4%	15.1%	13.7%	5.2%	13.8%	3.0%



The Floating Rate Indication: Disclose or Withhold it?

Editor's Note: This article is part of a series written by members of the CAS Committee on Professionalism Education (COPE) and the Actuarial Board of Counseling and Discipline (ABCD). The opinions expressed by readers and authors are for discussion purposes only and should not be used to prejudge the disposition of any actual case or modify published professional standards as they may apply in real-life situations.

Keeping Promises Insurance Company (Keeping Promises) filed for a 25 percent rate increase in their private passenger automobile program with the Insurance Department of their domicile state. Keeping Promises is a small monoline, single state automobile insurance writer with approximately \$5 million in annual premium. Keeping Promises used a competitive rate comparison to provide support for this rate change.

After receiving Keeping Promises' request, Joe Regulator of the Department of Insurance called the president of Keeping Promises. Joe stated that in his opinion the proposed rates were reasonable but, due to a new Department of Insurance requirement, all companies with at least \$5 million in premium must file a rate-level indication with all rate filings. Joe stated that all automobile rate changes are required to be approved by the commissioner of insurance (after considering recommendations from Joe) but gave the president of Keeping Promises a tentative approval recommendation for his rates. However, Joe stated that a rate-level indication needed to be prepared and reviewed by his department prior to the company's rate filing being presented to the commissioner.

Given their size, Keeping Promises does not have an actuarial department. To respond to the Department of Insurance request, Keeping Promises retained Steve Numbers, FCAS, MAAA.

Steve Numbers is the sole proprietor (and only employee) of Numbers-R-U's actuarial consulting firm. Steve completed the requested rate-level indication, which suggested a rate increase of between 25 percent and 35 percent based on various scenarios. Steve's report was filed with the Department of Insurance and Keeping Promises' rates were formally approved by the commissioner.

Approximately six months later, Steve was in the process of modifying the worksheet used in Keeping Promises' report for use in another assignment when he discovered an error in the rate indication calculation. After correcting the formula, the rate indication range for Keeping Promises changed from 25 percent-35 percent to 5 percent-15 percent. Steve immediately called the president of Keeping Promises to notify her of the error. Steve and the president call Joe Regulator to discuss the situation. Joe is concerned with the error on Steve's part but is embarrassed that he did not discover the error in his review of the rate indication. Joe states that given the rate comparison, it is likely that the commissioner would have approved the rate change even with the new rate indications and suggested that no further action is required.

Despite Joe's comments, Steve recommends to the president of Keeping Promises that a revised indication be filed. The president strongly disagreed and prohibited Steve from filing a revised rate indication with the Department of Insurance. Additionally, she reminded Steve of the confidentiality provision in the contract between Numbers-R-U's and Keeping Promises.

Does Steve have a professional obligation to notify the commissioner or file a revised rate indication or both?

No

Steve has notified Keeping Promises and a representative of the Department of Insurance (Joe Regulator). He has

fully disclosed the error in the rate filing and as a result Steve is not in violation of the Code of Professional Conduct. However, it would be good practice for Steve to document his conversations with Keeping Promises and Joe Regulator.

Even if Steve wanted to discuss this issue with the commissioner, the confidentiality provision in his contract with Keeping Promises and Precept 9 prohibit Steve from discussing this issue with anyone outside of his client unless given specific permission to do so.

Precept 9—An Actuary shall not disclose to another party any Confidential Information unless authorized to do so by the Principal or required to do so by Law.

Yes

While Steve's contract is technically with Keeping Promises, the work performed was specifically relied upon by the commissioner. It appeared from the conversation that Joe may be concerned about how this issue reflected on him and may not be in a position to speak for the commissioner. Steve has a professional obligation to disclose this error to the commissioner and if asked, to file a revised rate indication.

Failure to disclose this issue to the commissioner would violate Precept 1 and possibly Precept 8.

Precept 1—An Actuary shall act honestly, with integrity, and competence, and in a manner to fulfill the profession's responsibility to the public and to uphold the reputation of the actuarial profession.

Precept 8—An Actuary who performs Actuarial Services shall take reasonable steps to ensure that such services are not used to mislead other parties.

While the disclosure has the potential to result in loss of business to Steve, Steve has a professional obligation to disclose his error directly to the commissioner. ■

Committee Creates New Health and Managed Care Research Tool

by Alfred O. Weller, Member, CAS Committee on Health and Managed Care Issues

To some insurance people, “Re Search” means finding a market for hard-to-place re-insurance. To other people, it means searching for information in one place, finding a link to a new source, and then “re-searching” for the desired information. To Webster, “research” is careful, patient, systematic, diligent inquiry and examination undertaken to establish facts and principles in the search for truth. And, to most casualty actuaries, “research” means finding information and intellectual tools that make actuarial services more valuable to their respective employers and clients. Failed or inefficient research means the loss of precious, perhaps even billable, time and effort.

With the goal of making important research on health and managed care more accessible to casualty actuaries, the CAS Committee on Health and Managed Care Issues is reorganizing its Web page. This committee addresses actuarial issues related to property and casualty implications of health and managed care. Among its foremost objectives is the dissemination of research and information regarding health and managed care, as they pertain to property and casualty issues. The new changes represent significant progress in achieving this goal.

New developments in health and managed care originate from many sources, including casualty actuaries. Much good research is the work of others with nonactuarial professional credentials, and other actuaries. Issues in health and managed care, like so many other areas of actuarial practice, are often best served by interdisciplinary endeavors with professionals of distinct backgrounds working together. For casualty actuaries to contribute more effectively to this dynamic arena, they need easy access to new research developments, regardless of source.

At present, CAS members can access the committee’s Web page by going to www.casact.org, selecting “Research” and then selecting the committee. The committee’s Web page affords links to a bibliography, other organizations active in health and managed care, and other information of concern to casualty actuaries.

When the new changes are implemented (before January 1, 2002), there will be a section with abstracts of current research articles and publications. Each abstract will in turn link to a brief description (on the CAS Web Site) of the organization sponsoring the research, and each organization’s description will link directly to the respective organization so that CAS members can obtain the complete research work. In this way, casualty actuaries can easily access important new research in fewer keystrokes (mouse clicks) and less time than by tracking many Web sites and organizations on their own.

Committee members are contacting various organizations active in health and managed care research. As this article is being written, two organizations have already agreed to participate in the revised Web site and more are expected to follow.

The first organization to agree to participate is the Integrated Benefits Institute (IBI). The IBI is a national, nonprofit membership organization open to employers, insurers, health-care providers, brokers, consultants and others interested in the evolution of integrated benefits. IBI programs combine or coordinate the management and administration of workers compensation, group health, short-term disability, long-term disability, sick pay, statutory short-term disability, and other coverages. IBI provides: (1) benchmarking to help employers understand the performance and interactions of benefit programs; (2) a forum

for the exchange of views and information among its members; and (3) research to help improve integrated benefit program success. Recent research includes the relationship of productivity loss to benefits costs associated with disability and the design of health-care coverage.

The second organization is the Insurance Research Council (IRC), an independent, nonprofit research organization founded in 1977 and supported by leading property and casualty insurance companies and associations. IRC is wholly devoted to research and the communication of its research findings. Many casualty actuaries are familiar with IRC annual studies on trends in automobile injury costs and automobile insurance. IRC studies generally concern important public policy issues and often are based on extensive data collection and analysis.

Links to both the IBI and IRC Web Sites, as well as many other external health-related Web sites, can be accessed now through the Health and Managed Care Issues Web Page. These links will soon be enhanced with the addition of descriptions of the organizations and research abstracts.

The IBI and the IRC are the proverbial tip of the iceberg as the committee builds similar relationships with other organizations sponsoring research of interest to actuaries. The committee thanks the IBI and the IRC for their prompt and affirmative reply to our overture. We look forward to working more closely with these and other organizations in the future. As our ties with other organizations grow, the CAS will look to expand on these relationships. Indeed, this is one step toward furthering our common research goals through funding, joint

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University Liaisons Having an Impact

by J. Michael Boa

Linda Bjork goes back to college every year. But the 1987 graduate of the State University of New York (SUNY) at Geneseo doesn't go back to the homecoming game against St. John's Fisher or the School of Performing Arts' production of "Hot 'n' Throbbing." She makes the trek from Princeton, New Jersey to upstate New York to talk to students and professors about a career as an actuary.

Over the years Bjork's work as a CAS University Liaison to SUNY-Geneseo publicizing the actuarial profession has had an impact. "I was the first person to take an actuarial exam at SUNY-Geneseo," explained Bjork. "Now, there are about 10 people a year taking exams, and the school serves as an exam testing center."

When Bjork was a student earning her degree in math, the math department offered minimal direct help for prospective actuaries. However, her annual visits since graduating have raised awareness of the profession to a high level. The math department now offers a course that helps prepare students for the first actuarial exam. In addition to course work, the department supports students interested in the actuarial profession by coordinating internship opportunities, offering a dedicated scholarship, and providing on-site testing.

"It's important to keep in contact with the professors," Bjork said of her success in reaching out to students. "I also have my name and contact information listed with the school's career services department so students can contact me directly about the career."

The work of Bjork and more than 160 other CAS members has the CAS University Liaison Program thriving. The program was launched in 1999 and puts casualty actuaries on campuses to encourage the "best and the brightest" to consider a career as an actuary. University Liaisons work with professors in a position to reach students qualified for an actuarial career, and offer to make presentations, give lectures,

review course selections, and conduct informational interviews for students. Liaisons also work with math clubs, academic fraternities, and career centers.

Kathy Olcese has seen great returns on her investment of time as a University Liaison. Olcese has returned to the University of Notre Dame the past two years to participate in a program sponsored by the career center. She utilized the presentation provided to University Liaisons in the CAS Speaker's Kit for a session called "What is an Actuary." The presentation was designed by the CAS External Communications Committee to introduce the actuarial career to students who know very little about the profession.

Olcese also participated on a panel session put on by a professor at Notre Dame called "What to do with a Notre Dame Math Degree." "I was on the panel with other graduates from Notre Dame who had majored in math," said Olcese. "This session attracted a roomful of students who had not decided on a career focus for their math major. I'd say one measure of success is that for my company's recent recruiting effort at Notre Dame, we had an overflowing schedule for interviews for our actuarial positions."

Jim Rowland had a similar story to tell of his efforts with the University of Kansas. "A handful of students (at least five) have sat for exams as a result of my efforts with the faculty and students to raise awareness of the profession," said Rowland. "Two of those students had successful internships at my company and they plan to continue in the profession."

The impact of University Liaisons is being felt internationally, as well as in the U.S. About 20 schools around the world, including schools in Canada, Great Britain, and Australia, have CAS members serving as liaisons. **Daniel Tess**, who works for a consulting firm in Sydney, Australia, is serving as a University Liaison to two schools "down under." He was asked by the University of New South Wales to give

a lecture to their graduate program in actuarial studies on the topic of "General Insurance (P&C) Loss Reserving."

"The students had only rudimentary background knowledge on squaring triangles, and had no real knowledge or experience in general insurance," explained Tess. The lecture was well received, and afterward Tess got a thank you from the course instructor.

"Your lecture restored my faith in the actuarial profession," wrote the instructor. "[Y]ou were very elegant in the presentation of a difficult subject and showed just the right balance between theoretical issues and commercial considerations. The reaction from the students was excellent."

More success stories like these are needed as the actuarial profession competes against other disciplines for mathematically inclined college graduates. The CAS External Communications Committee is constantly recruiting for additional University Liaisons and welcomes members to volunteer as liaisons to any schools with which they have a desire to work. Additional information on the program is available on the CAS Web Site at www.casact.org/academ/ulprog.htm. ■

Latest Research

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research, and stronger relationships in general.

Current members of the Committee on Health and Managed Care Issues are **Pamela Sealand Reale** (chairperson), **Cara Blank** (vice chairperson), **Theresa Bourdon**, **Anthony J. Grippa**, **Eleni Kourou**, **Dennis Lange**, **Barry Lipton**, **John Pierce**, **Alfred O. Weller**, **Edward Wrobel**, **Bryan Young**, and **Heather Yow**. The Committee extends its thanks and appreciation to **Stew Sawyer** and the CAS Committee on Online Services, and to J. Michael Boa and Tiffany Kirk of the CAS staff for their help in designing and implementing these changes.

CAS members can offer comments and suggestions by contacting Cara Blank. ■

Actuaries Debate the CAS Election Process

by Arthur J. Schwartz

In November 1999 the CAS established a task force to review the CAS election process. In July 2000 the task force made its recommendations in a final report, which is available to CAS members on the CAS Web Site under "Member Services." One of the report's recommendations, which the board of directors accepted, was to publish articles about the election process in *The Actuarial Review*. The purposes of publishing such pieces are to educate the members about the election process and also to stimulate greater participation in the elections.

A Brief Description of the CAS Election Process

In the spring, the nominating committee solicits the names of candidates for its consideration through a "preferential ballot" process. The nominating committee reviews these candidates and selects a slate of one candidate for the president-elect position and eight candidates for the four positions on the board. This slate of candidates is published in the summer. Once the slate of candidates has been published in mid-July, any Fellow can add his or her name to the ballot by petition. The names of additional candidates are posted on the CAS Web Site in mid-August, at the close of the petitioning process.

Around the first of September, the ballots are sent out with a list of all candidates and their responses to several questions. The voting commences immediately. The results are announced on the CAS Web Site in early October and at the CAS Annual Meeting in November.

Stan Khury, John Purple, and Ed Shoop joined me last August in discussing the CAS election process.

Khury has a lengthy record of service to the CAS. His *Proceedings* papers have won the Woodward-Fondiller and Dorweiler Prizes. He has served on the CAS Board of Directors intermittently for more than a dozen years and was CAS president in 1984. He is a

principal with the firm of Bass & Khury in Las Vegas, Nevada.

Purple chaired the CAS Task Force on the Election Process. He has served as chairperson of numerous committees and as a member of the CAS Board of Directors (1995-1997). He is the chief actuary for the Connecticut Insurance Department, in Hartford.

Shoop has personal experience as a three-time candidate for the Board of Directors and has served on a wide range of CAS committees including Long Range Planning. He is a consultant who specializes in workers compensation and lives in Somis, CA.

Schwartz: *Some have commented that nominating one person for an office is not a real election. On the other hand, a competitive election could shift the president's role too far towards that of a policy maker, and it has been the long tradition of the CAS that the board, not the president, sets the policy. What is your view?*

Shoop: I appreciate the reminder that it is a long tradition. I have been a Fellow for 22 years now, and I think we all need to be reminded of this often: the board sets the policy. It's important because when I was considering running for the board, I made a courtesy call to the past and current presidents and the president-elect. When I said that I would be running as a candidate by petition, one of them asked me, "Why would anyone want to be on the board?" This question was terribly uninspiring. Being on the board and serving is precisely why I wanted to run. It's good to hear the further explanation of the role of the president. Of course, presenting one candidate for office, by definition, is not a real election.

Khury: Some Fellows may not want to run in a competitive election. They don't want the risk; they don't want to be seen as a "loser." Yet they are cut out for high office and leadership and are perfectly qualified. So far as the president's role, he or she is the *primus inter pares*, first among equals. The president's vote gets no more weight than a board member's vote. The

president's position in some ways is not as important as a board member, since policy takes years to develop. The president's term comes and goes in one year—it is over really quickly.

Purple: The president-elect position is similar to becoming a three-year member of the board. One year is served as president-elect, one year as president, and one year as [immediate] past president. The position is similar to a board member who is elected for a three-year term.

Shoop: Thanks, I hadn't thought of it that way. On another point, I believe that to have one person nominated for a position is ludicrous. Voting for one person [in a one-person field] can not pretend to be a true election.

Khury: How does it help to have more than one candidate for president-elect? If someone petitions, they can run for the office; so we can have competitive elections. As it is, the membership, with a single exception, has always chosen to go along with a single candidate. The fact is this condition is not unalterable. It is indeed possible to have a [competitive] election, as we have had once before and we are about to have this year.

Purple: The task force considered this issue carefully. When we started, if you had taken a poll of the members' views, I believe they almost certainly would have recommended that the CAS adopt competitive elections for the president-elect's office. I myself was leaning in that direction. From the outside, it seems like a sham election, since a voter can either vote for the nominated candidate, or withhold their vote. However, the task force surveyed other professional organizations, as well as our own membership, and what we learned had us rethink our positions. For example, while the SOA holds a very competitive election for president, the majority of other professional organizations do not. Basically, after extensive discussion of the pros and cons, the task force concluded that making

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Homeward Bound

by Chaim Markowitz

I have always wanted to take a tour of the United States. I got that opportunity on September 11, 2001—a day whose tragic events have been seared into the hearts and minds of all Americans. On this Tuesday morning, I, along with a few hundred actuaries from across the country, was attending the Casualty Loss Reserve Seminar in New Orleans. When the announcement came that the towers of the World Trade Center had fallen, my reaction was one of shock and disbelief. I worked on the 23rd floor of the WTC and thoughts of my fellow coworkers and friends flew through my head. There was nothing I could do from New Orleans, so my immediate concern was determining how to get home to Passaic, New Jersey.

A check of rental car locations disclosed that every rental car in New Orleans was taken. A train was not an option, as Amtrak was booked for the next three days. Thanks to the help of the

hotel concierge, we were able to locate a 24-passenger bus chartered for the long trip to New York City.

We had no problem filling the seats, and the decision was made to set off as soon as possible. We packed and bought food, and at 2:30 p.m. (3:30 EDT), 24 actuaries set off on an unplanned tour of the Southeast.

Although this was an experience to remember, the mood was far from joyous. Many of us were worried about friends and family back home in New York. We passed the time reading, playing cards, and making new friends. Being actuaries, we did our best to put an actuarial spin on the trip. Some of us, having paid close attention to the opening session of the CLRS, tried to come up with a best estimate of when we would arrive in New York.

We quickly made our way north past two of Louisiana's most picturesque lakes; Maurepas and Pontchartrain, until we reached the Mississippi bor-

der. Our first pit stop was at a visitors center, where in true Southern hospitality, they offered us free cups of soda. Then we drove on through the rolling plains of Mississippi, soon passing the historic town of Jackson. About six hours after we started, as we crossed over into Alabama, our spirits lifted. We had spent five hours traveling the highways of Mississippi and we were glad to leave it behind.

As night fell, we realized that we would need a place to spend the night. Normally, looking for a hotel room for one or two people, or perhaps a family, is not a problem. Finding rooms for 24 people plus our driver was a challenge. Luckily for us, we had **Tim Aman**, navigator extraordinaire, who works at Guy Carpenter. He mapped out our route and also found us lodging at an Econo Lodge in Chattanooga. Before we could think about sleep, we found

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the president's role subject to a competitive election would not be in the best interests of the CAS. This came from three observations.

First, the position should not be overly politicized. The CAS is an organization of professionals, and serving as president is a volunteer position. The real issue is: if someone really wants to be president, is there a barrier now? Our conclusion was no. Second, the president's primary role is to implement the policy decisions of the board. The president should be a "doer" rather than a maker of policy. Third, we didn't want to discourage anyone. If there's a competitive election, there's a winner and a loser. That may preclude a good person from running. The task force's conclusion was that a competitive election was not the way to go. If I were setting policy, a prerequisite to the president-elect position would be that you would have to previously have

been elected to the board.

Khury: Has an "outsider"—someone who had never served on the board—ever been nominated for president-elect?

Purple: As far as I know, no. Thus, previous service as a board member is a de facto requirement for becoming president-elect.

Khury: The process of finding someone to serve as president-elect is similar to the board of a corporation that is looking for a CEO. The corporation's board is looking for someone who can do the job, someone who can implement the board's decision. The president's role is somewhat of a caretaker job. It should not be based on who may be the most popular, but on who can connect the dots, as it were. Further, the president has the executive council to help implement policy decisions of the board.

Schwartz: For 2001, the board has approved the following two questions: "Why do you want to be a member of the board of directors?" and "What

qualities and experience would you bring to the board"? (There will be similar questions for the candidates for president-elect.) Some have commented that these questions do not allow the voters to learn the candidates' positions on various issues. Thus, voters do not get the information needed to make an informed choice. Also, there is no established discussion forum, either via CASNET or the CAS message boards, to make any public statements about their positions on various issues or to answer questions from voters. The intent, I believe, is to avoid active "campaigning" for office. Is this in the best interests of the Society?

Shoop: If one accepts the premise that the CAS does not hold real elections, then there is no point in having the "candidates" for president-elect respond to questions on issues. However, [some] members are saying that they do want to know where the candidates stand.

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International Happenings: The IAA

by Ralph S. Blanchard, CAS Representative to the IAA Insurance Accounting Committee

The following is a brief update on international issues of interest to CAS members, specifically those related to the International Actuarial Association (IAA).

What is the IAA, and how does it affect me?

The IAA has been around in its current form since 1998, but previously existed in other forms for decades. Before 1998, it was an association of individuals, but it is now an association of 44 associations from around the world. Members of the IAA include the Casualty Actuarial Society, the Society of Actuaries, the American Academy of Actuaries, the Institute of Actuaries of Australia, the Canadian Institute of Actuaries, and Het Actuariel Genootschap (Netherlands). All members of these organizations are also members of the IAA. If you are an ACAS, FCAS, MAAA, FSA, or ASA, you are also a member of the IAA.

But why care about the IAA if you currently practice in the U.S. and have no plans to do otherwise? There are several reasons, including:

- Minimum educational standards for IAA member associations
- Mutual recognition discussions taking place between IAA members
- International standards of actuarial practice
- Trend toward global standards for financial services regulation
- Trend toward global consistency in accounting rules

While the above list may be in the order of greatest to least interest for some, the issues are best explained by going in reverse order.

Trend Toward Global Consistency in Accounting Rules

For a global economy to work, at least in the financial markets, an investor in one country has to be able to evaluate potential investments in another country. This requires consistent financial reports and financial reporting rules to reduce the “learning curve” required to understand potential foreign

investments. In the past, this was accomplished to some extent by requiring foreign companies selling securities in a foreign exchange to file financial reports under more universally accepted accounting rules, such as U.S. GAAP or GAAP rules set by the International Accounting Standards Committee (IASC). But many foreign companies rebelled at the concept of filing financial reports under another country’s accounting rules, and the IASC rules were not felt to be complete and comprehensive enough to serve the purpose of global financial markets.

In response, the IASC undertook a long-term project to upgrade their accounting standards. This project relied heavily on volunteer efforts, and this is where the IAA made its mark. The IAA in several instances produced major contributions to the new standards, such that the IAA began to be sought out for its advice. When the IASC reorganized earlier this year to a more staff-driven structure with less reliance on outside volunteers, a “standards advisory council” was set up to provide guidance and advice relative to the IASC’s standards work. The only insurance organization given a representative on the standards advisory council was the IAA.

The IAA’s IASB Committee now coordinates work in this area. (The IASC became the IASB after their reorganization.) Current projects include responding to the fair value accounting proposals for nearly all financial instruments (excluding insurance contracts) and a new insurance accounting standard being developed for possible 2005 implementation. Key issues with the new insurance standard are the discounting of all insurance reserves (property/casualty and life) and the potential for FASB to use this new standard as a template for a new U.S. GAAP insurance standard.

I currently am the CAS representative to the IAA’s IASB Committee. Our October meeting in Hong Kong included discussion of both proposals and our response to those proposals.

Trend Toward Global Standards for Financial Services Regulation

Global financial markets depend on a stable financial system in the participating countries and the ability to move funds across borders. To this end, banking regulators have created international banking regulatory standards for internationally significant banks. Longer term the intent is to develop standards applicable to all banks in the participating countries.

The financial system of a country, however, includes brokerage firms and insurance companies, not just banks. Banks, brokers, and insurers can offer substantially similar products, so the financial regulatory system must address all three systems to be effective. Therefore, efforts to standardize financial regulation of banks across borders have been extended to brokers and insurers.

The International Association of Insurance Supervisors (IAIS) was created in 1994 to standardize insurance regulation across borders, among other charges. The IAIS is also a member of the Joint Forum, with its banking and brokerage counterparts. The Joint Forum is working towards eliminating potential opportunities for accounting arbitrage in the world financial markets. The IAIS work is generally in its infancy, and new regulatory guidelines and “model” regulatory standards need to be created. Research must be done on issues and alternatives. This is where the IAA can (and does) play a role. Without effective involvement from insurance experts, those from the banking side will dominate such discussions, given their head start in developing international regulatory standards for banks.

The Insurance Regulation Committee of the IAA has been providing research support and commentary on draft regulatory standards and issues raised by the IAIS. In the past year, it has produced at least three comment

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papers on such issues as the Basel Committee's proposed bank capital standards, the IAIS's insurance company disclosure guidelines, and the IAIS's paper dealing with capital adequacy. The IAA will also complete a white paper soon that describes insurer risks and capital needs.

International Standards of Actuarial Practice

The IAA is also stressing in its work the value that actuaries bring to the financial reporting (reserving) and the risk management/solvency process. This has raised the issue of whether international standards of actuarial practice should be developed, to match international accounting and regulatory standards. The IAA currently plans to develop such standards, and several IAA committees are now involved, in-

cluding the IAA-IASB committee and the IAA-Insurance Regulation committee.

Mutual Recognition Discussions

IAA activity extends beyond the strictly technical issues. For example, the IAA Professionalism Committee listed the following items on its October meeting agenda: cross-border practice and mutual recognition, mutual discipline agreements, and international actuarial standards. The Professionalism Committee's meetings often bring together representatives from various countries' actuarial organizations—the same people who would sit down with the CAS to discuss these issues outside the IAA framework.

Minimum Educational Standards for IAA Member Associations

As the IAA's role in accounting and regulation issues grows, membership in

the IAA may become more important. To ensure that IAA membership means something, the IAA wants to better define (and perhaps strengthen) its membership requirements. Under the current IAA structure as an association of associations, this means codifying and strengthening the minimum standards for member associations.

In one phase of this process, the IAA's Education Committee will attempt to develop minimum syllabus requirements, and they hope to have these in effect around 2005. **Mary Frances Miller** is the current CAS representative on this committee. While the CAS will have no problem meeting any minimum requirements, the requirements may affect the CAS syllabus and exam structure around (or possibly before) 2005.

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Schwartz: *Should this be on CASNET or the CAS Web Site?*

Shoop: Either. I would let the candidates state their positions and respond to questions from voters. If the board constrains the questions, the result is a perception of a tightly controlled process that they don't want to relinquish, that they don't want to open up.

Khury: What is the problem with a brokered selection? All that matters is that the selected individual does a good job for the duration of their term.

Shoop: There's no choice.

Khury: That's the path the CAS has chosen as best for it...The perception that there's no choice for the president-elect position is no great discovery. It may be a tightly controlled process, but that's not wrong, evil, or bad if in fact it produces people who can do the job. If the Nominating Committee serves up a candidate who, in the opinion of some, is not the strongest candidate, then it is likely that someone else will step up...and have their name placed in nomination. We have had this once before and we are about to have it again.

Shoop: Well, [some of] the members are not pleased.

Purple: The task force considered this. The board said that feedback from the members were that they wanted more information on the candidates running for the board. The feedback was that, as the CAS grows, fewer people know a specific candidate, and resumes are not enough. The task force also considered the possibility of campaigning for office and having discussion forums. They felt that was going too far. Don't forget that the candidates have real, full-time jobs. Having to respond to unlimited questions or to prepare position statements on complex issues may discourage well-qualified candidates. The task force chose a middle ground. Having two questions probably doesn't go far enough. I'd like to see a question like "What are one or two of the top challenges facing the CAS?" I'd like to see more open-ended questions. The main thing I'm looking for in a candidate for the board is a commitment to serve. I have been on the board myself. Some board members missed meetings, did not participate in the discussions, or had not read the material that had been distributed in advance of the meetings. I want someone who is going to attend all the meetings and [is] an active participant. *[Editor's Note: According to CAS Ex-*

ecutive Director Tim Tinsley, a 1998 Board policy regarding attendance states that if a board member is unable to attend at least three board meetings in any given year, an offer to resign is expected, to be accepted by the chair at his or her discretion.]

Khury: I would agree strongly with John's comments on the commitment to serve. Being on the board means you're going to do some work. There's really no glory there, just a lot of work. For candidates for president-elect, I don't know if I would want them answering questions. If you had to interview and qualify for any elected position, it might discourage some people. The Nominating Committee is choosing those people who are most likely to succeed. So far as questions go, I wouldn't add much to the questions posed. Basically, serving on the board or as president-elect, offers some recognition by one's colleagues, but not much else. The president in particular is probably spending half [of his or her] time, in addition to a full-time job, on CAS issues. Also, I don't think questions on the issues are that meaningful. Consider that many issues take several years to develop. We cannot pre-

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Horse Sense

by Marty Adler

The challenge of beating the odds must appeal to many with a mathematical bent, casualty actuaries included, of course. And one obvious place to face this challenge is at the racetrack. The late **Lew Roberts**, for whom I worked early in my career, claimed that he had developed a system that would beat the odds, but only to the extent of neutralizing the house advantage. So he turned his active mind to other pursuits.

But one of our Fellows has progressed beyond the handicapping of mere horse races and *breeds* thoroughbreds, though on a much smaller scale than the giant Kentucky stables in bluegrass country. Both activities require statistical analysis; both have a wealth of data available. Handicapping horse races is the “short-tail” aspect; you know the results very soon. Breeding is the “longer tail” end of the game. When a breeder buys a mare and selects a stallion to breed to her it will take far longer to learn if the breeder made a good choice.

Our Fellow has followed racing since age 12, when his uncle took him to the races at Saratoga. His first interest was in handicapping, a combination of art and science. Among the many characteristics that can affect the outcome of a race are age and gender, distance of the race, and track condition—all subject to objective analysis. Professional handicappers constantly study their statistics, looking for something that the others haven’t yet found—that hidden betting factor that can yield upset payoffs. The more rigorous handicappers will compute speed figures and track variants, attempting to rate each horse’s prior efforts to help determine who might win today. Thus handicappers are using prior results to predict future performance—sounds like a pursuit that’s not all that foreign to actuaries.

Our Fellow ventured into breeding in the mid-1980’s, when he bought a small share of a thoroughbred

broodmare. In exchange for paying the stud fee for the stallion, he received a half interest in any resulting foal. That mating worked out well. They sold the foal, a beautiful chestnut filly, at one of the many public thoroughbred auctions.

Like the giant Kentucky breeders, he must consider carefully the matings for each of his mares. He looks for pedi-

“Handicapping horse races is the ‘short-tail’ aspect; you know the results very soon. Breeding is the ‘longer tail’ end of the game.”

gree matches that will increase the probability that the resulting foal will be a successful racehorse. There are many theories about breeding: inbreeding, crossbreeding, and the like. A wealth of statistics is also available for the conscientious breeder to study.

One example of the analysis involved is found in a comprehensive report by an Australian breeder who studied the success of horses who were in-bred to certain successful female horses. That analysis concludes that such horses have a significant statistical edge over their competition. While relatively few horses have this breeding characteristic, the racing results of these horses, as a group, shows about a 30 percent advantage. Following these principles, this spring he bred a mare and a stallion that share a common female ancestor. The mare has Secretariat in her pedigree; and the stallion, Sir Gaylord. Secretariat and Sir Gaylord are half brothers, that is they share the same dam, the mare Somethingroyal. The resulting foal is expected to be born early next spring, and our actuary will



Above, colt by Cherokee Run (sire) and Arctic Assay (mare). Right, filly by Gold Fever (sire) and Storm Struck (mare).



Photos courtesy of R. Fisher

closely follow its development over the years to come.

He does not intend to rely exclusively on the work of others. There are various bloodstock statistical services that provide data for breeders to use to test their own theories. He has a few such theories supported by anecdotal evidence. Once he finds the time, he hopes to put these theories to a more analytical test.

He spends about 3-5 hours a week studying the pedigrees and race records of the thousands of stallions. He wants to discover the new stallion that will become the *next* successful producer, for once a stallion proves himself, the stud fees are increased beyond a level that he can afford. In years past this approach was successful when he got Cherokee Run and Storm Cat well below their current stud fees. Both have produced major winners in North America and in Europe. Some of his other choices were not so good. These experiences are helping him develop a profile of the type of racehorse that has a greater-than-average chance of becoming a successful stallion.

Currently he owns or shares in six broodmares, four of whom are in foal (pregnant), one two-year-old who is in training, one yearling, and three weanlings (horses born earlier this year). He plans to sell the weanlings in yearling sales next year, and one of the expected foals at a weanling sale next November. For the remainder of this year he will study the pedigrees of the six mares, trying to decide which stallion to breed to each one. He hopes to have breeding contracts finalized in December.

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WTC Collapses

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of his career with the Insurance Services Offices, Inc. (ISO), which had months earlier completed a move from Seven World Trade Center (the third building to collapse) to new offices in Jersey City, New Jersey. A memorial service for Miller was held on September 16 at Menorah Chapel in Staten Island, New York.

CLRS Final Sessions Canceled

On the morning of the attacks, the Casualty Loss Reserve Seminar was just starting its second day of sessions in New Orleans. The first CLRS concurrent session began promptly at 8:30 a.m. CDT, about 40 minutes after the first plane hit Tower One. CAS staffers interrupted the session periodically to relay information regarding the attacks, airport closings, and hotel accommodations. At around 9:30 a.m. CDT, CLRS Chairperson **Guy Avagliano** made the decision to cancel the rest of the meeting.

The Fairmont Hotel, site of the CLRS, went into emergency mode, usually implemented for hurricanes, and offered rooms at a reduced rate to stranded attendees. The hotel provided food services and installed a big screen TV in one of the meeting rooms for members to watch the news reports. By early afternoon, the number of people watching had dwindled to only a few, many having gone to their rooms to watch TV reports in private, contact family and colleagues, or simply decide what to do next.

Getting Home the Hard Way

With the grounding of all flights, several attendees, anxious to return home, chartered buses and hired cars to various destinations (see story, page 16), while others waited it out until air traffic began again. **Peter Royek**, who was a scheduled panelist for two Tuesday sessions, boarded a bus to Philadelphia with 52 other people, including seminar attendees, their spouses and other family members, and two drivers. Others, like **Regina Berens**, stayed behind in New Orleans and con-

ducted consulting work from her hotel room. Berens got home Friday, September 14 on one of the first few flights to land in Newark after the airport reopened. (She's flown 10,000 miles since September 11.) **Eduardo Esteve**, a CAS Affiliate member and meeting panelist, was stranded in the U.S. until the weekend. He and his wife were anxious to return to their seven-month-old child, who was being cared for by family members at home in Mexico. They arrived home the following Monday.

Definitely Not Business as Usual

Hundreds of businesses of every type—both those in the WTC complex and the surrounding area—were affected by the attacks. A total of 36 CAS members worked in offices in One and Two World Trade Centers. These firms included Aon, Fireman's Fund McGee, Guy Carpenter & Company, Kemper Insurance Companies, MMC Enterprise Risk Consulting, and SCOR Reinsurance.

In the days following the attack, some of those affected were able to work from home or in temporary offices. **Walter Wright**, of MMC Enterprise Risk Consulting, was back to work on Thursday in offices on the Avenue of the Americas in New York. **John Kulik**, whose firm SCOR Re as yet had no temporary facilities, went to work in the Chicago office for a few days.

Because of its location only a few hundred feet from WTC Plaza, **John Robertson's** St. Paul Re office was cordoned off; staff had very limited accessibility for a few weeks. While the building did not sustain structural damage, its interior had to be cleaned of accumulated dust from the surrounding air. Phone and e-mail services were also disrupted for several days. A few St. Paul Re employees were allowed in the building for short periods. The office was opened to all employees on October 12, but few of them could stand the still-lingering smoke for more than an hour and a half. St. Paul Re's current plan is to move back October 23. Robertson and some of his coworkers have been working from home and others from various locations. Holborn

Corporation lent St. Paul Re some space in lower Manhattan. Staff members have been working from a temporary location on Long Island, New York, and offices in Morristown, New Jersey and Philadelphia.

Finding Comfort

In the early moments of the attacks and in the days and weeks following, the CAS Web Site proved to be a source of information and comfort to CAS members. Members frequented the "Water Cooler" section of the Discussion Forum of the CAS Web Site, using it to learn news of the attacks and of colleagues employed in the WTC buildings. On September 14, CAS President **Patrick J. Grannan** posted a message on the CAS Web Site to all CAS members, candidates, and friends. In the message, Grannan announced that a new section on the Web site's Discussion Forum had been established to help share further information.

The CAS has received several messages of condolences from actuarial organizations from throughout the world. Groupe Consultatif, an organization representing 33 actuarial associations from 27 countries in the European Union, issued the following statement: "Our profession is a small closely knit one, with links in particular to the World Trade Center...many amongst us who have spent time there, and who have regular contact with professional associates and friends there—some of whom will doubtless have perished in this outrage...We feel a close bond in this time of adversity, and a profound sense of sorrow at the grievous blow to your country, your members, and our colleagues."

Other notes of condolence can be found in the "What's New" section of the CAS Web Site. ■

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dict what issues are going to come up during the tenure of the successful candidate. The real questions are: "Is this person authentic? Are they going to represent the members' interests?" On some issues, time has to be spent gathering data. You can't really know what

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Halpert, Weinstein, and Gonwa Win Reserves Prize



Aaron Halpert (left) and **Scott Weinstein** (right), along with coauthor Christopher Gonwa, won the 2001 Reserves Prize for their paper, "Evaluating Reserves in a Changing Claims Environment" at the Casualty Loss Reserve Seminar on September 10 in New Orleans. The Reserves Prize is awarded to the authors of the best paper submitted in response to a call for papers regarding reserves whenever the CAS conducts the program. A specially appointed committee judges the papers on the basis of originality, research, readability, completeness, and other factors. Recipients need not be CAS members. The amount of the Reserves Prize is determined annually. This year's prize paper and other papers presented at the CLRS can be found in the 2001 Fall *Forum* or on the CAS Web Site under "Publications." ■

Web Site News

CAS Web Site Reaches 5-Year Milestone

October 1, 2001, marks the CAS Web Site's (www.casact.org) fifth anniversary of providing news and information to CAS members, candidates, and the public. Launched and managed by the Committee on Online Services (COOS), the CAS Web Site usage has grown from about 7,000 Web pages accessed in its first month to nearly 700,000 a month during July 2001.

The CAS began offering online services in 1993 with the CAS Bulletin Board System (BBS), the Web site's forerunner. An April 1996 survey conducted by the CAS Task Force on Electronic Services found the membership to be keenly interested in the possibilities of a CAS Web Site. The CAS Executive Council approved the idea of a Web site in July 1996 and the CAS Board of Directors was given the first look at the proposed Web site during its meeting in September 1996. The Web site was activated to the public in October 1996.

Five years from its activation, through continuous enhancements, the CAS Web Site continues to be at the forefront of online services provided by professional societies. Some major milestones include:

- **October 1, 1996**—CAS Web Site launched.
- **December 1996**—Fall 1996 exam passing candidate numbers posted (Web site usage increases 500% over the first month).
- **May 1997**—CAS Online Catalog introduced.
- **August 1997**—CAS Downloadable Library introduced.
- **October 1998**—First CAS Online Course activated.
- **February 1999**—30 past volumes of the *Proceedings* added to the Download Library.
- **October 1999**—Spin-off Web site, www.BeAnActuary.org, introduced.
- **May 2000**—Complete collection of the *ASTIN Bulletin* (70 volumes)

added to the Download Library (Web site usage surpasses half a million viewed pages per month for the first time).

- **September 2000**—Online meeting registration form implemented for the 2000 CAS Annual Meeting.
- **October 2000**—Online dues form implemented.
- **May 2001**—All *Proceedings* (1914-1959) added to the Web site. All *Forums* and *Discussion Paper Programs* are also available online.

Web site developments over the next year will focus on increasing overall Web site usability with such features as pre-populated Web site forms, online exam registration for CAS candidates, online publication ordering, and an improved Participation Survey.

COOS welcomes feedback on the CAS Web Site and other online services. To contribute ideas or comments, e-mail COOS Chair **Stewart Sawyer** (stewart_sawyer@acordia.com). ■

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issues you'll be dealing with on the board. So the meaningfulness of a candidates' statement of their position on various issues is highly and erroneously way overrated.

Shoop: I also agree with the need for a strong commitment to serve. That's self-evident. I like what you've said about the president being the "doer." But I can't get comfortable with not wanting a candidate to answer questions. I definitely agree that the president needs to be somebody who can

be effective in implementing the policies of the board, although she or he may not be permitted to be a policy maker. Maybe the answer here is to stop the sham of electing a *president* and admit that what is really being sought here is an effective *chief operating officer*. Let the board "hire" one by simple appointment. Take the office of the president right off the ballot.

Purple: The task force's actual recommendation was that the Nominating Committee could present one or several candidates to the board. Then the board would elect the president-elect.

The members would not have to know who had been in contention. Yet the board did not accept this recommendation. They may have felt that there would be too many changes to the CAS Bylaws and the Constitution or that this would take the election process totally away from the members. However, this recommendation would have removed the issue of how to deal with a petitioned candidate.

Part Two of the discussion will appear in the next issue of *The AR*. Questions or comments can be sent to esmith@casact.org. ■

D.W. Simpson Makes CAS Trust Donation

The Trustees for the CAS Trust (CAST) are pleased to announce that D.W. Simpson & Company has donated \$10,000 to the Trust on September 20, 2001. This brings the total contribution of the D.W. Simpson & Company to \$60,000 to the Trust. The CAST was established in 1979 as a nonprofit 501(c)(3) organization to afford members and others an income tax deduction for contributions of funds to be used for scientific, literary, research or educational purposes. A CAS Trust scholarship program will be announced in the near future. The CAS is grateful to the D.W. Simpson & Company and its employees for their contribution to the advancement of actuarial science. ■

25 Years Ago in *The Actuarial Review*

by Walter C. Wright

We continue to be struck by the unchanging nature of many of the issues that The AR tackles. Keeping in mind the article by Clive Keatinge on page 8 of this current issue, look at what Stan Khury had to say in an October 1976 opinion piece.

And Now, Amalgamation?

The Subcommittee on Organization Structure of the Actuarial Profession, in its final report to the Joint Committee on Organizational Coordination, identified six reasons why reorganization should be considered. Viewed closely, the Subcommittee's reasons fall into three categories:

Clarification. Amalgamation would make clear to our public—government, employers, educational institutions, business in general—what an actuary is and what an actuary does. It would also clarify the differences between the various actuarial specialties. And it would strengthen the actuarial profession's position on accreditation.

Economy. Amalgamation would presumably eliminate most of the current duplication in administration, meetings, clubs, publications, etc.

Consistency. Amalgamation would assure greater consistency in the treatment of the issue of professional conduct, as well as in examination and other educational standards.

However one may view the reasons for studying the issue of amalgamation, its serious consideration by each CAS member remains one of the most pressing assignments in a long time. ■

Homeward Bound

From page 16

ourselves very hungry. At about 9:30 p.m., a mere seven hours after we began our trip, we pulled into Tuscaloosa, Alabama for supper. Much to our surprise, we encountered another charter bus of actuaries who had also rented their own bus! What are the odds of that? They decided to follow us to Chattanooga, which meant finding hotel rooms—for about fifty—and so after dining on some of Alabama's finest delicacies we set off again. We pulled into the city around 1:00 a.m. CDT.

After a five-hour nap, we set off on the second leg of our journey. As we started out the next morning, our spirits were a little better. The shock of the previous day's events had not entirely worn off, but now we were only 15 hours from our goal. We were heartened by the knowledge that when night fell on Wednesday, we would be sleeping in our own homes and close to our

families and loved ones. Thanks to our fellow actuaries on the other bus, we borrowed a movie. With *The Blues Brothers* playing on the bus' video monitor, we were greatly entertained by John Belushi and company while we sped through the Great Smokey Mountains of Tennessee and made our way into Virginia.

In Virginia we were treated to the magnificent sight of the Blue Ridge Mountains. Between mountain peaks, we caught glimpses of peaceful farmland and we enjoyed watching the cows and horses graze in the fields. Like little kids, some of us took great pleasure pointing out the various farm animals we passed. It took the harshness off the reality that we knew we would soon know more about the tragic events once we reached our homes.

The road to New York led us through several states and we were soon able to add West Virginia, Maryland, and Pennsylvania to our list. Finally, as night fell, we reached our first destina-

tion—Allentown, Pennsylvania. We changed navigators and were soon in the capable hands of **Eric Gottheim**. As we got closer to New York, the bus took on the feel of a war room. We heard numerous rumors about which roads leading into New York were open or were closed. After making calls on our cell phones, and discussing our options, we decided to head for the George Washington Bridge. Finally, at around 10:00 p.m., we made a second stop in New Jersey. Several passengers, including myself, got off and headed home. The bus then continued into NYC to drop off the remaining passengers. After 31 hours and 1,300 miles, we had made it! We were finally home!

Many of us had mixed emotions. While we were happy to be home with our families, we also realized that many thousands of people would not be going home to their families. Our hearts go out to all those people affected by this tragedy. May the world never know such a tragedy again. ■

So, Tell Me Again Why All This Is Important?

The IAA has the potential to influence significantly the accounting and regulatory rules under which actuaries in many countries will have to live. It is doubtful that the U.S. can remain unaffected by these rule-making initiatives.

It is imperative that CAS members play an active role in these developments. My experience tells me that, in the absence of CAS input, many IAA work products risk reflecting a bias toward long-duration life policies, where public data is plentiful and insurance risk is minimal. As the largest body of property/casualty actuaries in the world, the CAS provides expertise and resources to the IAA efforts that may not be available elsewhere. While there are actuaries outside the U.S. who understand (and can communicate) many of the perspectives and issues we care about, they are not as numerous and may not always be heard.

The IAA also is developing professional education and practice standards that may find their way to our borders. We may not be able to control the creation of international professional guidelines. (They may be imposed, for example, in reciprocity agreements attached to free-trade initiatives.) Therefore, it is imperative that the CAS stay involved in the process and help shape the results, or externally-developed results might be forced on us that do not even address the issues we face.

What can I do to help?

You can notify the CAS Vice President-International, **LeRoy Boison**, that you want to help. We need people to review draft proposals and peer review our draft responses. The only requirement is your commitment to review documents thoroughly, as some of the IAA draft white papers and responses have totaled up to 100 pages. Proficiency in a foreign language is not required, because all IAA business is communicated in English. If you might like to help, please let us know! ■

Loss Emergence Factors

by Stephen W. Philbrick

I received an e-mail recently from **Dave Clark** with some thoughts on an actuarial issue. The issue has a mouthful of a title—Infinitely Decomposable Loss Development Patterns—but the underlying concept is more basic than that title would suggest.

We tend to confront two actuarial questions with two different approaches. When given loss data by size of claim, and a need to project the future distribution of amounts by size, we tend to fit a statistical distribution to the results. However, when we are given emergence data of claims, whether counts, payments or incurred values, we are more apt to calculate empirical ratios and apply those ratios to the future. I asked **Tom McIntyre** why we use an empirical approach to development factors in light of the distributional approach to size of loss problems, and his answer was, “Because it works.”

I suspect he is right, but I also think there is value in a more statistical approach. Dave Clark is expanding on some work done by Robbin and Homer, (www.casact.org/pubs/dpp/dpp88/88dpp501.pdf), which in turn is based upon some thoughts I had discussed in the 1986 *Discussion Paper Program* (www.casact.org/pubs/dpp/dpp86/86dpp116.pdf).

In brief, the underlying concept is that we should analyze the emergence, whether claim counts, claim payments, or claim incurred amounts, with respect to a single point in time. Our normal approach is to look at the empirical development of a bundle of claims, typically from a 12-month period such as an accident year. We need to abstract twice: first, from the actual claims for the period of time to the expected claims for that period of time. Second, rather than analyzing an entire period, in which some claims are older than others, we need to examine a point in time—the expected claims coming from an arbitrarily small interval of time. If we can specify a statistical form for the emergence pattern of this point in time, we can calculate emergence patterns on a variety of bases from that building block. For example, the ubiquitous accident-year patterns would consist of an average (integral) of the point-in-time pattern over a one-year period. Integrating over three months would produce accident quarter factors. Policy year factors consistent with the accident year factors would involve a slightly more complicated integral, one reflecting the parallelogram of exposure over the 24-month period. Reinsurers could calculate underwriting year patterns by integrating over a 36-month period. This approach is particularly well suited for calculation of incomplete period factors, such as six- or nine-month accident factors. Finally, for companies with unusual exposure growth, either positive or negative, emergence factors could be calculated by integrating over the period reflecting the expected exposures at each point in time.

“...we should analyze the emergence, whether claim counts, claim payments, or claim incurred amounts, with respect to a single point in time.”

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Card Trick

by John P. Robertson

Amy has seven cards numbered 1, 2, 3, 4, 5, 6, and 7. She randomly deals three each to Bill and Celia, keeping one for herself. All three people then look at their cards. Can Bill and Celia communicate with each other, in the presence of Amy, so that Bill and Celia can each determine what cards the other holds, but Amy will not know who holds any given card, other than the one that she herself holds?

Claims Data

Christopher Yaure's puzzle involved claim count data on five 12-month policies. He was supplied with claim counts on the five policies, and was subsequently provided with a corrected claim count for one policy. In the corrected

claim count data, the mode was exactly the same as in the original data, the mean claim count was exactly 1 larger than the original data, the variance was exactly 2 larger, and the median was exactly 3 larger. Additionally, the final counts satisfied what Christopher called the "Rule of 3s":

The final number of claims for each policy was a multiple of 3. The ratio of high to low number of claims was 3. Exactly 3 policies had an average of more than 3 claims per month.

The question was, what was the final claims frequency distribution?

A number of solvers determined that the final counts were 15, 36, 39, 45, and 45, and that the 39 had originally

been reported as 34.

Solvers for this puzzle include Nicki C. Austin, **Alan Erlebacher**, **Jon Evans**, **Sean Forbes**, **Moshe Goldberg**, **Betty-Jo Hill**, **John Hinton**, **Jim Mohl**, Yipei Shen, David Uhland, **Glenn Walker**, and Mike Ziniti.

If you want to see how this solution can be derived, please e-mail me at JPR2718@AOL.COM.

Self-Referential Aptitude Test

In the last column, Sean Forbes should have been listed among the puzzle solvers. ■



Nonactuarial Pursuits

From page 19

Generally, the mare's owner pays the stud fee and assumes all the risk that the foal will not be good. Once the foal is born there is no refund, or adjustment on the stud fee, if the resulting foal proves to be inferior. For example, if the foal suffers from any of a number of defects that may preclude it from withstanding the required physical training—a not uncommon situation; approximately 30 percent of foals born never race—auction prices will not recover a mare owner's costs. He purchased a mare last year and bred her to the Kentucky Derby winner, Charismatic. Not wanting to risk the high

stud fee, he negotiated a "foal-sharing" arrangement with the owners of that stallion. The horses were bred earlier this spring and the contractual arrangement calls for the foal to be sold at public auction in November 2002 (a few months after the foal will have been weaned) with the proceeds of that sale to be split 50/50 between the mare owner and the stallion owner. He retains the right to pay the advertised fee at any time prior to this sale in order to retain full ownership of the foal. He may elect that option if the foal looks spectacular, if the market for auction yearlings is strong, and if he has the money. That's a lot of ifs. If, on the other hand, the foal does not look promising, he has significantly hedged his downside risk by sharing it with the stallion owner.

Russ Fisher likes to think that his experience evaluating risk in our profession has helped him assess the range of risk he is taking on each horse transaction, helping him create a variety of risk-sharing strategies. He considers himself fairly lucky so far, but is not ready to give up his day job, designing and directing an e-commerce strategy for the worldwide treaty business of GeneralCologne Re. ■

Brainstorms

From page 23

One stumbling block I ran into was the identification of statistical distributions that fit the underlying data reasonably well and could be easily integrated. Dave Clark has identified a special case of a beta distribution that may be suitable. The mathematics are beyond what I like to include in this column, but Dave Clark would be happy to share with you the preliminary work he has completed. He can be reached at daveclark@amre.com.

I am sure the traditional approach will continue to be the approach of choice when one has decent amount of data in a particular format (such as accident year) and the need to estimate factors on the same basis. The alternative approach is best suited to situations where some conversion is needed—that is, data is available in one format, such as accident year, but factors are needed in a different format, such as policy quarter, or incomplete-year factors are needed. However, if we become adept at identifying patterns for point-in-time distributions for those cases, we might decide to use this approach more generally. ■

In Memoriam

Philip D. Miller

(FCAS 1975)

September 11, 2001