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*Zabra Surattwala (left), wife of Taber Surattwala (holding son Yusuf), celebrates with Tatyana Kerbel (right) at a special reception for new CAS Fellows and their families held during the 2008 CAS Spring Meeting in Québec. Mr. Surattwala and Ms. Kerbel were among 72 people earning the FCAS designation in June 2008.*



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# New Fellows by Mutual Recognition

**Alastair Chapman, FCAS**  
Fellow, Institute of Actuaries of Australia  
Vice President, Carvill America Inc.

**Louis Chi Wah Mak, FCAS**  
Fellow, Institute of Actuaries of Australia  
Consultant, Watson Wyatt Worldwide

**Shams Munir, FCAS**  
Fellow, Institute of Actuaries of Australia  
Dominion of Canada General Insurance Company

**Sean O'Dubhain, FCAS**  
Fellow, Institute of Actuaries-U.K.  
QBE The Americas

**Richard A. Wood, FCAS**  
Fellow, Institute of Actuaries-U.K.  
Actuary, Liberty Mutual Group 

## Help Locate CAS Members

The CAS has lost contact with the following members. If anyone knows of the whereabouts of or how to contact these members, please contact the CAS Member Resource Center at [MRC@casact.org](mailto:MRC@casact.org).

- |                     |                        |                    |
|---------------------|------------------------|--------------------|
| 1. Kimberly Bowen   | 6. Thomas Kolde        | 11. Gina Smith     |
| 2. Jeffrey Clements | 7. Laura McAnena       | 12. Dominic Tocci  |
| 3. John Coffin      | 8. Erica Partosoedarso | 13. Jeffrey Warren |
| 4. Alison Drill     | 9. Joseph Sarosi       |                    |
| 5. Feifei Ford      | 10. Elissa Sirovatka   |                    |

# From Analysis and Measurement to Management




**D**uring our typical actuarial training, especially in the area of mathematics and statistics, we actuaries develop and hone our skills in the analysis and measurement of various risks. Whether it is estimating the cost of risk transfer, the cost of retained risk, or the cost and risk associated with the settlement of unpaid claims, we use our mathematical and statistical skills along with the deep understanding of the risk process to provide financial measurements. When we begin to think of enterprise risk management, the initial thought naturally gravitates to our ability to analyze and measure risk. There is definitely a role within enterprise risk management for actuaries, and casualty trained actuaries in particular, as we are very well qualified to provide valuable input and support to the process.

As many insurers made the recent transition from a long-maintained operating structure containing the traditional underwriting and pricing areas to a new product management structure, they learned that there are additional skills beyond analysis required to assume management roles. This is similar to the days when, as part of the traditional actuarial career path, a qualified actuary would move from a strict analytical role to an assignment requiring both analysis and personnel oversight. These additional management skills moved practitioners beyond those skills learned through the examination process. As we have often seen, the ability to perform detailed, quality analysis does not guarantee success leading an actuarial department. Similarly, moving from a pricing actuarial role to one of product management warrants additional skills and abilities. Our understanding

of the insurance company operations and risk transfer dynamics through our rigorous training and examination process should qualify us as prime candidates for such positions. In some cases, breaking through the actuarial stereotype of a conservative focus on a single rate need and reserve indication is essential. For more on that topic, please see my previous column (“Communicating Uncertainty—The World of Variance,” May 2008 *Actuarial Review*).

In enterprise risk management, actuaries face a similar issue moving from analysis to management. In fact, the Society of Actuaries has recently created a new associate level credential, the Chartered Enterprise Risk Analysts (CERA—please use the initials and not the acronym). This designation seems to recognize the expertise typically associated with the analytic nature of actuarial work. And you’ll notice that the designation title does not include the word “management.” Just as all actuaries are not destined to become chief actuaries or even managers of other actuaries, in the enterprise risk management space not every actuary involved in the process is destined to become a chief risk officer. But the

actuarial skills *should* be valuable tools in analyzing and measuring components of enterprise risk management.

In general, all actuaries should be encouraged to utilize their analytic talents within a larger framework. Specifically, those actuaries who want more responsibility in product management or ERM should develop human resource management and general business skills—highly valued expertise in our ever-changing business environment. 

**Actuaries who want more responsibility in product management or ERM should develop human resource management and general business skills.**

## More on “You Might Be an Actuarial Consultant”

### Dear Editor:

“You Might Be an Actuarial Consultant” (*Actuarial Review*, May 2008) is one of the more clever Random Samplers. Mr. McClenahan always manages to inform and entertain by finding a new prism through which to view our little pond. Not only is every one of the listed attributes very real, I suspect there is a host of other indicia of the actuarial consultant. Here are three offerings:

1. If you address your spouse as “do you have an understanding of this or that” then you are probably an actuarial consultant having just returned from a deposition.
2. If you have committed the standards of practice to memory, you are probably an actuarial consultant.
3. If you record the time you spend with your family under a client code, then you are probably an actuarial consultant.

—C. K. Stan Khury, FCAS

## Kudos to Longtime Members

### Dear Editor:

The article on folks who have been members for at least 50 years deserves special thanks (“In My Opinion: Long-time Members Laid the Groundwork,” *Actuarial Review*, May 2008).

Several years ago I suggested a regular panel at the Annual Meeting in which long-time members recount stories of key actuarial issues prevalent when they achieved their designations. Such a panel would provide the new members with perspective on how our profession has evolved. The idea never took hold or at least I am unaware of any such panels.

As examples, the difference between permissible and balance point loss ratios, the dearth of incoming candidates, and recognition of investment income in ratemaking were all issues for those with more than 50 years in the CAS. And, it might even be possible that, for some of them, the reserves for which they were responsible have actually achieved ultimate value.

It is a wise child that knows its own father, and it is a wise profession that recognizes its foundations. Thanks for helping strengthen the actuarial profession.

—Alfred O. Weller, FCAS 

## More Family Ties

The May 2008 *Actuarial Review* article, “Family Ties Redux,” generated yet another list of CAS members who are related to each other.

### Spouses (Husbands and Wives)

Neil Aldin and Mary Lou Lacek  
 Gary and Susan Ciardiello  
 Tom Daley and Karen Barrett Daley  
 Smitesh and Tricia Davé (Tricia is a life actuary.)  
 Robin and Judy Gillam  
 Keith and Kathy Holler

Norm and Brenda Hebert  
 Chuck McConnell and Susan Patschak  
 Tim and Judy Perr  
 Jim and Denise Rice  
 Jimmy and Heather Yow

### Fathers and Daughters

Donald Gould and Stephanie Gould Rabin  
 Gary Ransom and Monica Ransom



# Actuarial Profession Earns Corporate Branding Campaign of the Year




**P**RWeek Awards, the leading awards program for the public relations industry, presented the “Corporate Branding Campaign of the Year” to the actuarial profession for its work on “Actuaries—Risk is Opportunity: The Revitalization of a Profession’s ‘Brand’.”

The actuarial profession was one of five finalists for this prestigious award. Other nominees in the corporate branding category were Nintendo of America, Toyota Motor Sales USA, Tesla Motors, and InterContinental Hotels Group. The awards program showcases the best public relations campaigns, people, and companies from the past year.

This award is directly tied to the campaign’s goals to maintain actuaries’ leadership strength in traditional fields and promote the profession’s expertise and qualifications for broader leadership and risk management roles.

In addition, The Holmes Report honored the profession with the Silver SABRE for best branding and reputation campaign among non-corporate associations. The SABRE Awards recognize superior achievement in branding and reputation, focusing on public relations programs that demonstrate the highest standards of innovation, integrity and effectiveness.

Learn more about the revitalized brand and how you can play a role in the future success of the initiative by visiting [www.ImageoftheActuary.org](http://www.ImageoftheActuary.org). 

## Actuaries

Risk is Opportunity.<sup>sm</sup>


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## Image of the Actuary—Living the Brand

**T**wo recent additions to the Image of the Actuary Web Site will help you bring the actuary brand to life: “The Checklist for Success” and “The Scenario Planning Guide.”

Regardless of whether you’re a new actuary or a seasoned professional, you can make a difference in how all actuaries are viewed—including yourself. The Checklist for Success outlines steps you can take throughout the course of your career to better position yourself, and the profession, for success.

Have you ever been in a professional conversation with a peer or run into a C-suite member and wish that you knew the best way to explain your role as an actuary? Scenario Planning outlines a variety of situations where those questions may come up, and prepares you with responses that highlight your skills, your position, and your profession. Whether you adjust the answers to make them your own or use them as is, the most important thing is, you’ll be prepared.

Visit [www.ImageoftheActuary.org](http://www.ImageoftheActuary.org) to access the Living the Brand materials, and while you’re there, watch the actuaries in action video series, read articles to help further your career, and access other tools to help you succeed. 



# What Exactly Are Our Core Skills, Anyway?

**A**dopted in its present form over a year ago, the “refreshed” Centennial Goal (CG) currently states:

The CAS will be recognized globally as a leading resource in educating casualty actuaries and conducting research in casualty actuarial science. *CAS members will advance their expertise in pricing, reserving, and capital modeling*, and leverage their skills in risk analysis to become recognized as experts in the evaluation of enterprise risks, particularly for the property and casualty insurance industry.

The first sentence reflects our international vision. The clause about risk analysis in the second sentence refers to enterprise risk management (ERM). Both of these are “stretch goals” that have seen a great deal of activity and attention within the Society over the past few years. Although we are making real progress, it will take much more work for us to really establish ourselves in these areas.

But while we gaze at the horizon, let us not miss the possibilities lying at our feet. The italicized clause (my emphasis added)—the “Core Skills clause”—is highly significant because it is a new element in the refreshed CG. Core skills are where we already are. The CG now recognizes the importance of our traditional areas of expertise. For most of us, and for a long time, these will continue to form the backbone of our livelihood. We must be responsive to the needs of our publics not only in new areas such as ERM, but also in the emerging and evolving sphere of our core skill sets.

There are many “new” initiatives worthy of exploration that most would agree fall squarely within our expertise. Not only do these present opportunities for the profession, they represent services that in many cases are not currently being provided by anyone. For this discussion let’s confine ourselves to two: the premium deficiency reserve and the evaluation of risk transfer on reinsurance.

One of the triumphs of the U.S. property/casualty actuarial profession was the universal reserve opinion requirement. This did not fall into our laps. It was a hard fought battle with regulators, accountants, managements, and others who either thought an opinion was unnecessary or thought it could be done in a different way (or by people other than us). We also had to fight with some of our own members who thought the risk was too high and that we didn’t want our signatures on something that could blow up on us. But we got through those issues, and the reserve opinion is today a cornerstone of our profession, with ongoing risks but also undeniable rewards. I think the industry, the public, and the profession have all been well-served by the institution of this requirement.

There is no similar requirement for rates. Consequently, this most venerable of all actuarial functions is now being severely challenged as many customers turn to MBAs, rating techs, even overseas professionals—in many cases with grave results. Do we want to cede this ground? Has that ship sailed? Or are there steps we can take to stem the tide?

One thing we could do is to take ownership of the premium deficiency reserve (PDR). This reserve, which must be evaluated and set up line by line, provides for the fact that an unearned premium reserve established on the basis of an inadequate rate is an inadequate reserve. Estimating this reserve is actuarial bread-and-butter, and yet the PDR is frequently not looked at by an actuary at all unless invited by management or the auditors.

A PDR opinion requirement (as a line item in the loss reserve opinion or as a separate and perhaps confidential document) would bring this issue to the fore every year, with the actuary in the driver’s seat. It goes without saying that the actuarial evaluation of the PDR would be more conservative than many managements’—which is probably why actuaries often don’t get asked to estimate it—so one sure result would be enhanced reserve adequacy. Furthermore, this would establish a formal actuarial check-and-balance that would help encourage market

**We must be responsive to the needs of our publics not only in new areas such as ERM, but also in the emerging and evolving sphere of our core skill sets.**

discipline. An actuarial PDR, even in a small or immaterial amount, would promptly raise the red flag of rate inadequacy to management and perhaps strengthen our hand for a greater degree of actuarial involvement in the rate setting process itself.

The opportunity is also ripe (perhaps overripe) for a risk transfer opinion on reinsurance, and maybe even in some cases for insurance. Management has to provide a general reinsurance certification, and accountants have to include a reinsurance review in their audits. As yet, however, there is no affirmative opinion on risk transfer (actuarial or otherwise) explicitly required for reinsurance contracts. We would serve the public good by pushing for such an opinion, and—while we're at it—insisting that we are the most qualified to provide that opinion. Given the recent activity and press in this area this might be our last, best chance to make significant inroads in this area, if we are willing to accept the risk as part of our professional responsibility. It seems to me that the risk to the industry of not making risk transfer opinions is greater than the risk to the practitioner of making them.

Of course, this is my personal opinion as a CAS member. The CAS does not advocate for public policy issues. But the American Academy of Actuaries (AAA), the public face of the profession, has recently decided as part of their strategic vision to start actively taking advocacy positions for the public and for the profession. I suggest we reach out to the AAA, and our representatives on its committees, with an eye toward crafting a course of action that would achieve these ends.

If we are professionals, we have to take responsibility for those things we know we are good at. Of course, some people will get sued for getting it wrong. There's risk in everything we do. That doesn't mean we shouldn't do it—if we don't do it someone else will do it, and not as well as we could. Stretch goals are great, but let's make sure we also reach out and grab the fruit hanging over our fence, about which there is general agreement among our publics that we are *already the best professionals for the job*.

*Kenneth Quintilian is the CAS Vice President—Administration.* **AR**

## CAS Fellow Named Insurance Woman of the Year

**R**ebbecca C. Amoroso, FCAS 1992, was honored by the Association of Professional Insurance Women (APIW) when she was named the 2008 Insurance Woman of the Year. Initiated in 1976, the annual award recognizes women who have exhibited strong leadership in the insurance industry.

APIW President Maryanne Sherman praised Ms. Amoroso by stating on the APIW Web Site, "Her leadership and accomplishments, as well as her commitment to supporting and advancing women, are exceptional examples of all of the qualities that APIW looks for in the recipient of this highly prestigious honor."

"What distinguishes Rebecca as a true leader in her field is the passion and commitment she has shown toward developing people," Ms. Amoroso's colleague, William C. Freda, Vice Chairman and U.S. Managing Partner of Deloitte LLP, said in an article on the Deloitte Web Site. Ms. Amoroso was also recently selected to serve as a member of Deloitte's National Women's Initiative Steering Committee, which encourages corporate policies that take into account the increasingly diverse workforce. "Rebecca's efforts to increase diversity and the advancement of women have had a lasting impact, both within our organization and beyond," said Mr. Freda.

She is the first woman and the first actuary to serve as the U.S. Insurance Industry Group Leader for Deloitte, where she has worked for 22 years. Prior to her current position, she held a number of leadership positions at Deloitte, including the U.S. Actuarial Leader.

Before joining Deloitte, she worked at ISO, and later at AIG. "Those two experiences, the technical foundation from ISO and the business foundation from AIG, prepared me quite well for consulting," said Ms. Amoroso. She credits her background in actuarial science with helping her succeed. "The actuarial profession allowed me to apply my analytical skills in a way that led to a greater understanding of the business of insurance, which formed the framework of my knowledge about how an insurance company operates," said Ms. Amoroso.

When asked about advice for actuaries hoping to take on leadership roles, she noted that, because of their deep understanding of insurance, actuaries can make the transition into many other roles within the industry, including leadership positions. "If you look at industry leaders, you will find many CEOs, CFOs, business unit leaders, COOs, etc., who started their careers as actuaries," said Ms. Amoroso. "The profession offers significant opportunities to build upon that technical knowledge and to grow into future insurance leaders of tomorrow." **AR**

# Help Shape the Future of the CAS: Complete the 2008 Quinquennial Membership Survey

By Nancy Braithwaite, Chair, 2008 Quinquennial Survey Task Force

**W**hat topics should be the focus of CAS continuing education and research efforts? How should the CAS contribute to actuarial practice beyond North America? What new services should the CAS provide to members?

CAS members may see these questions and others on the 2008 Quinquennial Survey, which will be conducted in the fall. The membership survey, which is administered by the CAS every five years, affords the CAS a valuable opportunity to align our activities with the needs of our members. The Quinquennial Survey Task Force encourages you to complete the survey, which will be available online. Prizes will be awarded to randomly selected respondents.

The task force understands that CAS members are asked for their opinions in a variety of ways each year. While those requests for input address important issues, they do not cover the broad range of strategic issues facing the organization that the five-year membership survey does. You may have declined to complete surveys in the past because the narrow topics that are addressed do not pertain to you, but we guarantee that this will not be the case with the 2008 Quinquennial Survey. This survey covers issues related to actuarial publications, research, online services, basic education, continuing education, governance, professionalism, and much more.

Your input provided through the survey is crucial in shaping the short- and long-term direction of the CAS. As evidence, consider the impact of the 2003 Membership Survey. The results of the last five-year survey motivated the restructuring of CAS publications and the development of our new peer-reviewed research journal. To explain, the 2003 responses indicated that the CAS should strive to maintain some form of refereed journal and should concentrate on improving the overall organization of CAS publications. This input was provided to the Task Force on Publications, which led the effort to remove research papers from

the *Proceedings of the Casualty Actuarial Society* and to create a new outlet for peer-reviewed papers, *Variance*.

"The Quinquennial Survey Task Force has worked closely with CAS leadership, including members of the Board, the Vice Presidents of the Executive Council, and Committee Chairs, to gather input on the most important issues facing our Society both now and in the future," observed CAS President Chris Carlson. "The Task Force has translated that input into a comprehensive questionnaire in order to provide the CAS leadership with broad membership input not easily be obtained through other means. I appeal to every member to express his or her views

through the Quinquennial Survey. Your input will allow us to serve you better now and lead the Society into the future."

Look for an invitation to complete the membership survey in the fall. Because the survey is administered online, it will be quite easy to complete. Printed copies will be available upon request by contacting the CAS Office.

Having invested a lot of time and energy designing questions and reviewing the survey instrument with survey research consultants, the Quinquennial Survey Task Force eagerly awaits the release of the survey and the responses from the membership. The Task Force will deliver a report on the results to the leadership of the Society in early 2009. The final report will be made available to the entire membership on the CAS Web Site. We urge you to do your part in shaping the future of the CAS by completing the survey.

*Editor's note: In addition to Chairperson Nancy Braithwaite, members of the Quinquennial Survey Task Force include David B. Bassi, Jacqueline Frank Friedland, Timothy L. Grabam, Kenneth L. Leonard Jr., Faith M. Pipitone, Manalur S. Sandilya, Alan Seeley, Joanne S. Spalla, David W. Warren, and staff liaisons J. Michael Boa and Todd P. Rogers. AR*



# When is U.S. GAAP Going Away?

By Ralph Blanchard, CAS Vice President-International

**C**urrently, the accounting system known as U.S. Generally Accepted Accounting Principles (GAAP) must be used by all public companies based in the United States and is the main resource used to keep U.S. statutory accounting up-to-date. Many foreign insurers also use U.S. GAAP insurance accounting rules for their own financial statements under current international accounting rules, known as International Financial Reporting Standards (IFRS), and can continue to do so until the International Accounting Standards Board (IASB) finishes their insurance accounting project. But U.S. GAAP, in all likelihood, is going away. The question is not “if” it’s going away, but “when.”

Why should U.S. GAAP be phased out, and who is pushing for this? The main driver of the effort appears to be the U.S. Securities and Exchange Commission (SEC), with the support of the Financial Accounting Standards Board (FASB) chair, Bob Herz. Much of the rest of the world is moving to IFRS (including Canada, Europe, Japan, China, Australia, et al.), and many believe it is unrealistic for U.S. GAAP to remain the sole holdout. The handwriting is on the wall. But how should the U.S. make the transition?

The SEC has stated that the best way to get things moving is to set a target date for the transition. There is speculation that the tentative transition date currently on the table is 2013. Because it will take companies some time to get ready, the FASB and International Accounting Standards Board (IASB) have agreed upon a target of 2011 for completion of all major projects. There would then be a two-year quiet period from 2011 to 2013 (so companies would not have to reprogram mid-stream during the transition).

What does this mean for the insurance industry? To begin with, it means that the days are numbered for U.S. GAAP standards such as Financial Accounting Standards (FAS) 60 and 5. But the date for this is still uncertain. If the IASB can get its insurance project done by 2011 (in the form of a final standard), then it would probably be implemented in the U.S. in 2013, with the rest of IFRS. If the IASB misses the 2011 window, then any change would probably be delayed until several years after 2013.

Another uncertainty is the final form for the IFRS replacement to FAS 60, FAS 5, and the rest of the U.S. GAAP standards

that affect insurers. Loss reserves would most likely be discounted, with a risk margin. While unearned premium reserves may remain in something very close to their current form, this issue is still being debated with no consensus preference yet expressed by the IASB. However, the current IASB Board has shown distaste for recording “gains at issue.” Recording something other than the current unearned premium would result in an immediate gain or loss upon policy

**U.S. GAAP, in all likelihood, is going away. The question is not “if” it’s going away, but “when.”...Those interested and involved with insurers’ financial reporting are living in interesting times.**

issuance.

All of this means that those interested and involved with insurers’ financial reporting are living in interesting times. When do we need to get ready for the transition? When will we know what we are transitioning to? Will the exposure draft of IASB’s new insurance accounting standard come out in 2009, making a 2011 date for finalizing the standard more likely, or will the date slip, making it more likely that insurance accounting will miss the 2011 window? Stay tuned. **AR**

# San Diego to Host Predictive Modeling Seminar

**T**he CAS will host the last Seminar on Predictive Modeling on October 6-7, 2008 in San Diego at the Westin San Diego. This seminar will educate attendees on predictive modeling techniques relevant to insurance companies while also providing opportunities for further discussion.

In the general session “How Will Predictive Modeling Change the P/C Industry over the Next 5-10 Years?” Jim Guszcza, FCAS, and senior manager at Deloitte Consulting, will lead a discussion that will delve into the following questions:

- Will there be any property/casualty lines of business that will not be touched by predictive modeling?
- What areas of a company’s operation (i.e., claims, reserving) besides ratemaking will be affected by predictive modeling?
- Will advances come from new statistical methods, new data sources, both, or other sources?
- Most property/casualty predictive modeling applications have been implemented during good economic times. Will there be any implications for these applications from the economic downturn that we are now experiencing?

- As consumers become more educated about how insurers are using predictive modeling to uncover new rating variables, what are the risks of their being able to game the system?
- Is the ultimate scoring model, which had a unique rate for every risk, possible or even desirable?

Thirty concurrent sessions will also be offered including basic- and intermediate-level sessions covering analytic techniques such as GLMs and pricing optimization. Complementing these sessions on techniques and analysis will be practical sessions on communicating predictive modeling results, project management, fraud/claim applications, and practical issues with model development. Presentations will be available on the CAS Web Site to download and print two to three weeks prior to the meeting as the seminar will be paperless.

Don’t miss your last chance to take part in the Seminar on Predictive Modeling. In 2009, this seminar will be combined with the Ratemaking Seminar.

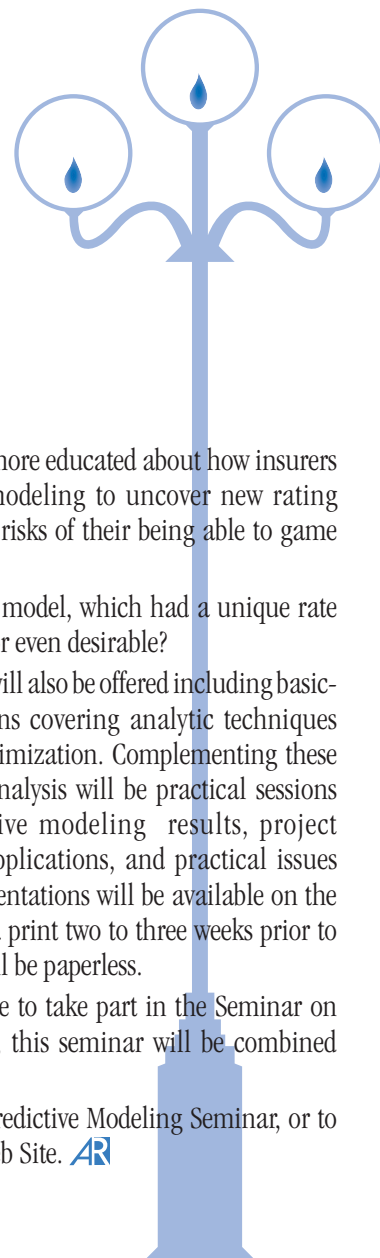
To learn more about the Predictive Modeling Seminar, or to register, please visit the CAS Web Site. 

## Reinsurance LAS Set for New York Next Month

The Reinsurance Limited Attendance Seminar is scheduled for September 15, 2008 at the Embassy Suites in New York City.

Multiple sessions are in the works, including “Implementing an ERM Program” in which the panel will share their experiences building an ERM framework. There will also be discussion of the unique attributes of a reinsurer’s ERM program versus a primary company’s ERM program. A session titled “Emerging Risk” will explore considerations made on both the reserving and underwriting side at various stages of an emerging risk’s development. This session will also examine the lessons that can be learned from asbestos and the potential emerging risks associated with climate change.

Don’t miss your chance to learn about these hot topics and more. Visit the CAS Web Site for more information. 



## 2008 CLRS Set For Washington D.C.

**N**ow is the time to register for the 2008 Casualty Loss Reserve Seminar (CLRS), which will be held at the Omni Shoreham in Washington, D.C. on September 18-19.

The CLRS is an opportunity to present and discuss significant loss reserving issues and their related financial reporting implications. The CAS, the American Academy of Actuaries, and the Conference of Consulting Actuaries have devised this year's program to include a range of topics to interest professionals and students from a wide array of disciplines, including insurance, accounting, and risk management. Moreover, the seminar meets the continuing education needs of actuaries and other professionals whose responsibilities include loss reserving. CAS members may earn up to 15 credits by attending.


With multiple sessions offered in a variety of areas, CLRS attendees can learn the latest developments, issues, and techniques on lines of business, financial reporting, variability and ranges, international issues, catastrophes and mass torts, reinsurance, professional development, and emerging issues. Some of the planned sessions include a general session titled "Actuarial Standard of Practice No. 43: Property/Casualty Unpaid Claim Estimates," which includes a contest and prize money. A second general session on fair value accounting titled "Preparing for Fair Value" and a luncheon speaker on Social Security will also be offered. Also proposed for this year's seminar is a nationally renowned speaker for the professional development track as well as our 2008 Reserves Call Paper Program.

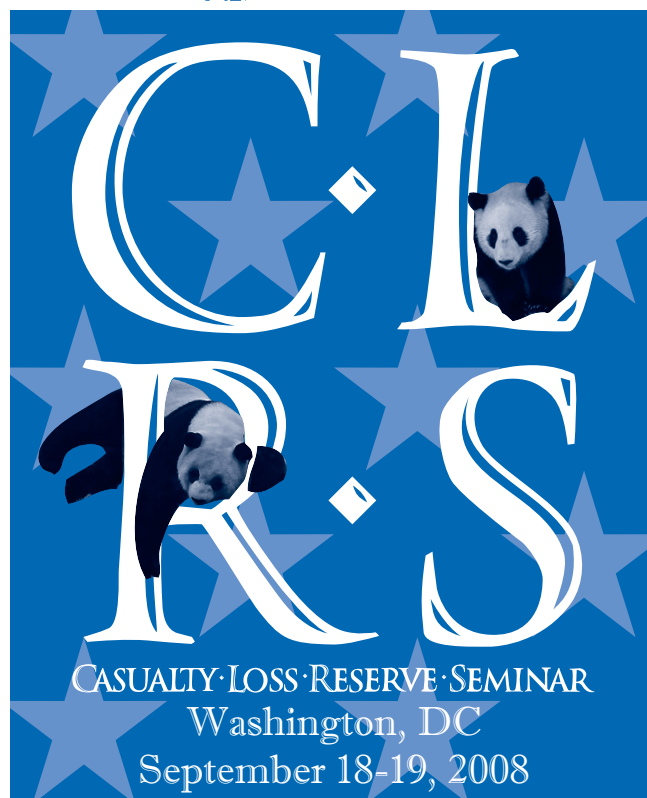
### **Exhibit at the 2008 CLRS**

The CLRS organizers encourage companies to consider exhibiting their products and services to professionals who collect, compile, and analyze data on loss reserving. This seminar will give exhibitors the opportunity to show how their products or services can help solve the loss reserve professional's problems. To learn more about this opportunity, visit the CAS Web Site at [www.casact.org](http://www.casact.org).

Additionally, the CLRS will again offer basic and intermediate reserving sessions, which are primarily targeted to those attendees who are not members of the CAS. Please pass this information along to those in your organization who would benefit from (some) reserving information, such as underwriters, agents, and brokers.

Located in one of the most influential cities of the world, the Omni Shoreham Hotel offers a resort atmosphere and a personal taste of politics, culture, art, and music at its best. The four-diamond Omni Shoreham Hotel is nestled on 11 acres in picturesque Rock Creek Park in northwest Washington, D.C. and is only steps away from the National Zoo.

Don't miss your chance to earn continuing education credits, network with other loss reserving professionals, and visit the famous pandas at the National Zoo! Visit [www.casact.org/clrs](http://www.casact.org/clrs) for more information. 



# 2008 Annual Meeting Visits the Birthplace of Excel

Come to Seattle where, like our profession, technology and art blend into one. Scheduled for November 16-19 at the Sheraton Seattle Hotel, the 2008 Annual Meeting offers a variety of continuing education sessions, opportunities to sharpen your business skills, and ample time for casual discussions. With two receptions and a dinner, you'll be able to catch up with old colleagues, make new acquaintances, and simply socialize with actuarial peers.

Eugene Robinson, the meeting's featured speaker, is a newspaper columnist and assistant managing editor for *The Washington Post*. His twice-weekly column is syndicated in 145 newspapers across the nation, and through it, Gene Robinson has covered the ongoing presidential race and told his readers and audiences why the stakes in November are tremendously high. With more than 25 years of reporting experience, his political commentary is welcome on news programs like *Meet the Press*, *Hardball with Chris Matthews*, *Countdown*, and other programs on MSNBC. With the CAS Annual Meeting closely following the November elections, Robinson will bring his perspective and understanding of the issues on this important political season.

Four general sessions, covering a breadth of topics, are planned:

- The lack of rate regulation in some other countries can lead to more innovative actuarial thinking, which is unencumbered by thoughts such as "I could never get that approved by regulators." What may we be missing out on? What insights can U.S. actuaries gain from those who may not have such artificial restrictions imposed on their thinking process?
- Actuaries in the U.K. and Australia each conducted a survey on reserving methods—both with quite revealing results. In similar fashion, the CAS Committee on Reserves is conducting its own survey. This general session will


compare and contrast the results from these three surveys and explore what can be gained from them.

- Actuarial professionals, more or less familiar with the theory of moving from silo-based to enterprise-wide risk management, are ready to hear about ERM in practice. Actual examples of ERM implementations in insurance and in non-financial companies will be presented. Topics will include using economic capital as a means to foster risk-based decision making, establishing ERM governance, structuring an ERM organization, potential sources of correlation, and accuracy/simplicity tradeoffs.

- The subprime crisis negatively affected many different businesses, including the insurance industry. Those companies that were better capitalized were better able to weather the storm. What have we learned from this experience? Are there other similar problems lurking in the industry? Which other potential areas may be undercapitalized in the event of an unforeseen crisis? And what steps, if any, should we be taking?

Concurrent sessions will delve into various topics like the auto frequency, claim fraud modeling, predictive modeling, enterprise risk management, off-shoring, reserve variability, climate change, fair value and international

accounting, workers compensation updates, medical malpractice frequency, business skills, and professionalism.

Located in the city's vibrant core, the AAA Four Diamond award-winning Sheraton Seattle Hotel is a gateway to all the sights, sounds, and experiences of the Pacific Northwest. The hotel is conveniently situated nearby historic Pike Place Market, the Seattle Art Museum, the Space Needle, Experience Music Project, and a host of other exciting attractions. Register today! 



**2008 CAS Annual Meeting**  
**November 16–19, 2008**  
**Seattle, Washington**

# The Polls Are Open!

Fellows are reminded to cast their ballots for the 2008 CAS elections. Fellows who registered for online voting can cast their ballot through the CAS Web Site. On August 1 the CAS Office mailed the paper ballot package to Fellows who did not register for online voting.

Roger M. Hayne has been selected as CAS president-elect for 2008/2009. Mr. Hayne currently serves as the CAS Vice President-Research and Development. Candidates for director positions are James Christie, Eugene Connell, Richard Fein, Wayne Fisher, Clive Keatinge, Chester Szczepanski, Alice Underwood, and Mavis Walters.

Fellows can visit the "Meet the Candidates" section of the Web Site to

learn about the candidates. Candidates provided a one-page biography, an additional page of relevant biographical information, a short statement entitled "Why I Want to Serve," and a brief statement identifying their positions on issues of special interest to them.

In the "Open Question Forum," which was open June 30-July 14, Fellows were able to pose questions to candidates. At the close of the forum, candidates had one week to respond to questions. A link to the questions and responses was posted in the "Meet the Candidates" section on July 23.

Completed election ballots must be received at the CAS Office by August 29, 2008. CAS Fellows can either submit ballots online or by mail. [AR](#)



*Roger M. Hayne*

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## CAS Meetings Open to All

### Tell your Colleagues about the 2008 CAS Annual Meeting

Since 1974, nonmembers were unable to attend CAS Spring and Annual Meetings without an invitation from a member via the association's Member-Guest Program. With the CAS Board of Directors rescinding the program at its March 2008 meeting, nonmembers are now welcome to register directly for all CAS meetings.

The 2008 CAS Annual Meeting, set for Seattle, will feature a number of educational sessions that would benefit insurance professionals beyond actuaries. In addition to staying current with industry developments, nonmembers will have plenty of opportunities to meet people working in the actuarial field. Please tell your interested colleagues so that they can also benefit from the sessions and networking opportunities provided at the upcoming Annual Meeting and future meetings. Point your colleagues to [www.casact.org/annual/](http://www.casact.org/annual/) where they can learn more. [AR](#)



# Beyond GLMs

**M**ultivariate statistical analysis has been with us for quite some time. It was well established when I started using it in the 70's while working on a number of projects in my employer's statistical research unit. Our main tool for this was the SAS PROC GLM. "GLM" stood for general linear models. PROC GLM fit its models by minimizing the sum of squared errors, which is equivalent to maximum likelihood estimation if we assume a normal distribution of the errors.

More recently, the acronym "GLM" has taken on a different meaning. It currently stands for *generalized* linear models. The new GLM improves on the old GLM in two important ways. First, its estimates are based on maximum likelihood for a wider class of distributions known as the "linear exponential family." The normal, the Poisson, and the Gamma distributions are members of this family, but others like the lognormal and the Pareto distributions are not. The second improvement is that the predictor of the mean value can be a function (called the link function) of a linear predictor. For example a GLM might predict the mean,  $\mu$  of a Gamma distribution to be equal to the log of a linear function by setting  $\mu = \exp(\alpha_0 + \alpha_1 \cdot x)$ . The GLM will calculate the  $\alpha_0$  and  $\alpha_1$  that maximizes the likelihood of your data.

In this article, I want to discuss removing all restrictions on the model. Personal computers and software now exist that make it easy to maximize the likelihood of almost any reasonably behaved stochastic model. I will illustrate with a model that does not fall into the conventional GLM structure, to show the power of the current technology. In this model, the losses have a Pareto distribution with a trended scale parameter that depends upon the year of loss ( $year = 0, 1, 2, \text{ or } 3$ ) and a second covariate  $p$ . The data for this model, along with code implementing the fits in this article, are posted on the CAS Web Site with the Web version of this article. Let's start with the model

$$F(x) = 1 - \left( \frac{\theta}{\theta + x} \right)^\alpha, \text{ where } \theta = (\theta_0 + \beta \cdot p) \cdot \tau^{year}.$$

Using a generic optimizer such as Excel Solver or R's `optim`, we find that the values  $\hat{\theta}_0 = 16,512$ ,  $\hat{\alpha} = 2.905$ ,  $\hat{\beta} = 22,394$  and  $\hat{\tau} = 1.049$  maximize the likelihood of the data. The value of the log-likelihood,  $\hat{\ell}$ , for these parameters is -9,165.

Given the estimates  $\hat{\alpha}$  and  $\hat{\theta}$ , where  $\hat{\theta} = (\hat{\theta}_0 + \hat{\beta} \cdot p) \cdot \hat{\tau}^{year}$  an estimate of the mean for a given value of  $p$  and  $year$  is given by the expression  $\hat{\theta} / (\hat{\alpha} - 1)$ .

A good GLM program will not only solve for the parameters, but it also will also provide diagnostics indicating the significance of each parameter. Let's examine the significance of the covariate  $p$ . First, we fit a model without  $p$  by maximum likelihood and obtain values  $\tilde{\theta}_0 = 32,163$ ,  $\tilde{\alpha} = 1.929$ ,  $\tilde{\tau} = 1.072$  with the log-likelihood,  $\tilde{\ell} = -9,235$ .

Since the search space of the first model contains that of the second,  $\hat{\ell} > \tilde{\ell}$  ( $-9,165 > -9,235$ ). But is it significantly larger? This question is answered by the likelihood ratio test<sup>1</sup>. If the coefficient,  $\beta$ , of  $p$  is zero the statistic  $2 \cdot (\hat{\ell} - \tilde{\ell})$  will have a  $\chi^2$  distribution with one degree of freedom. The value of this statistic is 140, which is significantly higher than what one would normally observe from a  $\chi^2(1)$  distribution, so we can say with near certainty that  $\beta \neq 0$ .

When one fits a model to data with a large number of observations, it is often the case that one will find covariates that are statistically significant, but not practically significant. By "practically significant" I mean that the difference in the predictions has no real impact on the decisions you are making with the model.

I like to use graphs to determine the practical significance of variables. Here is one way to do that with our example. First, fit a model without the covariate  $p$ , as done above. Then for each value of  $p$ , plot the percentage of expected losses, equal to  $\hat{\theta} / (\hat{\alpha} - 1)$ , for all records  $p_j$  with,  $p_j \leq p_i$ , against the corresponding percentage of observed losses. This was done in Figure 1. If the covariate is "practically significant," the plot will lie on the 45° line. Here we see that the plot lies well below the 45° line. So we should include  $p$  in our model.

<sup>1</sup> I highly recommend the new book, *Generalized Linear Models for Insurance Data*, by Piet de Jong and Gillian Heller. The likelihood ratio test, along with other diagnostics are described in Section 5.8

Figure 1

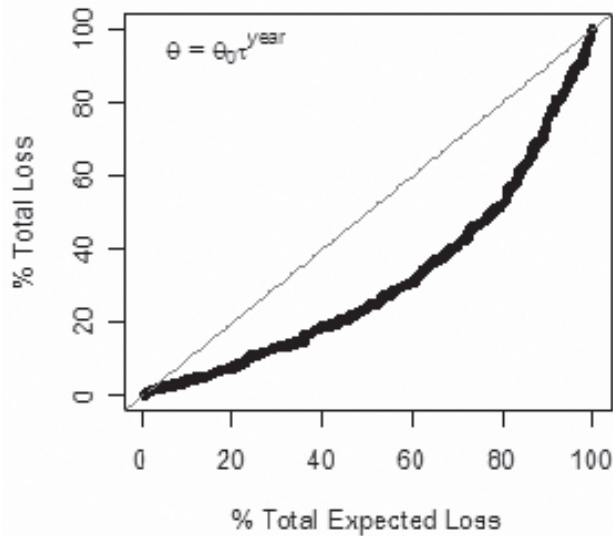


Figure 2

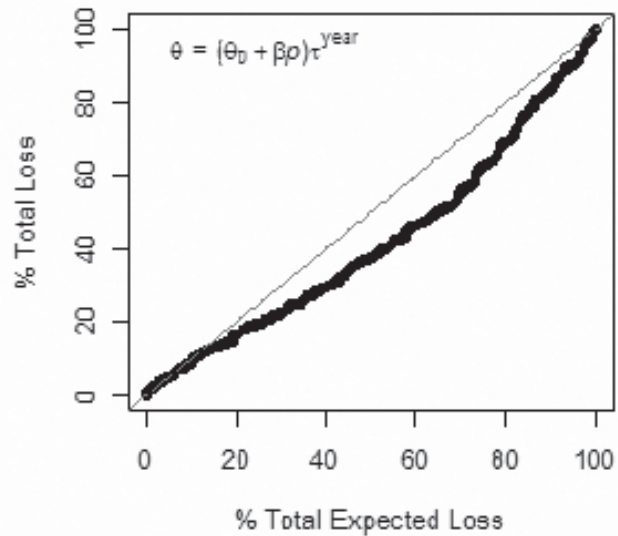


Figure 3

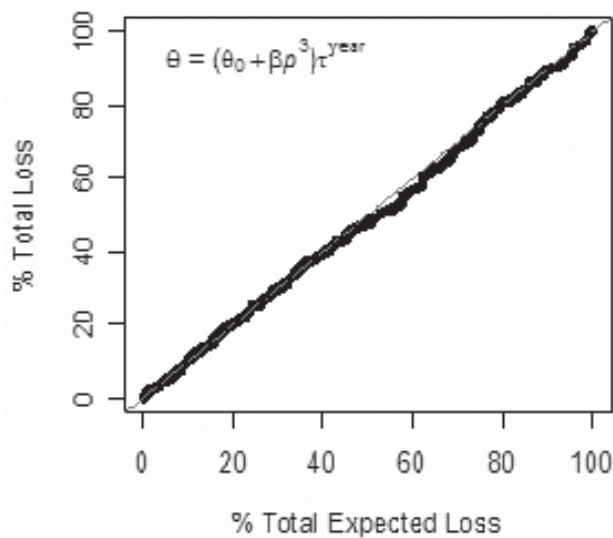
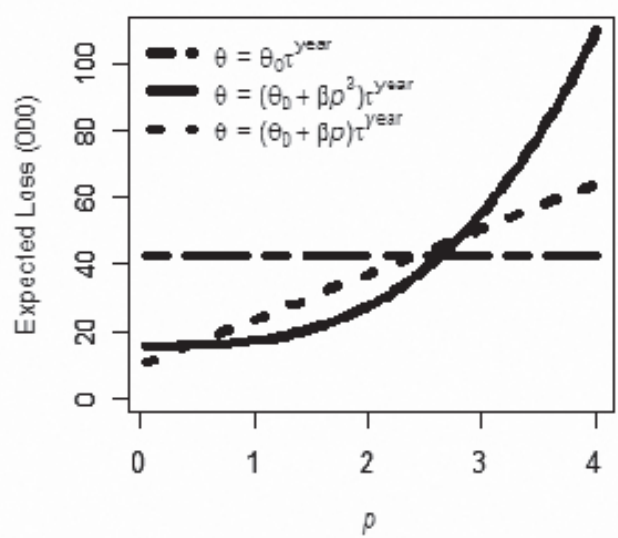


Figure 4



After we include  $p$  in our model, it behooves us to repeat this plot on the new model. This was done in Figure 2. While the plot lies closer to the 45° line than in Figure 1, there is room for improvement. This means that the model has specification error and that a transformation of  $p$  could improve the fit. Finding

the right transformation usually requires some trial and error. As shown in Figure 3, it turns out that using  $p^3$  as our covariate gives a better fit. The expected losses for each model in  $\text{year} = 3$  are plotted against  $p$  in Figure 4. [AR](#)

# A “Must-Read” Guidebook for Achieving Data Quality

*Data Quality, the Field Guide* by Thomas C. Redman Ph.D. (Digital Press, 2001, \$54.95, 256 pp.)

Reviewed by Virginia R. Prevosto, Member,  
CAS Data Management and Information Educational Materials Working Party

*Editor's Note: This is the last review in the series of book reviews by the CAS Data Management and Information Educational Materials Working Party. The complete set of nine texts are reviewed and compared in “Survey of Data Management and Data Quality Texts,” published in the Winter 2007 CAS Forum.*

**D**ata Quality, the Field Guide, by Thomas C. Redman, Ph.D., focuses on data quality efforts and programs inside organizations. This book provides many constructive approaches for establishing or improving the data quality programs in businesses. It is a “how to” manual for those new to data management and a great refresher to those who have been in the field for a while. As the quality of the work product that an actuary produces depends so much on the quality of the available data, the topic of this book should greatly interest actuaries.

The book first reinforces that all disciplines and levels in an organization have a stake in data quality. The author presents the viewpoints of various stakeholders from the CEO to the customers of the organization.

For an actuary who has had responsibility for data management or data quality in their organization, this book brings no surprises. However, the nice feature for the experienced data manager—actuary or non-actuary—is the author’s well-organized presentation of the issues, illustrated with many charts and logical pictorial diagrams of data quality concepts and processes.

For actuaries starting out in data management, this book should be required reading. It quickly presents many concepts that a new data manager needs to know, and the author presents them succinctly on a high level. The illustrations and diagrams will help solidify the concepts quickly and can be adapted by readers to their own situations. Your adaptations of his charts and diagrams to a business case for data quality improvements will lend an authoritative flavor to your plans.

The book is also worth reading for actuaries who interact with those responsible for data in their organizations. The knowledge and insights readers gain will help put them on equal footing with those who are responsible for the data.

A key point is that organizations need to fix the source or cause of the data quality issue and invest in source data quality rather than correcting it downstream.

According to Redman, “organizations must recognize that finding and fixing data errors is time consuming, expensive, non-value-added work,” otherwise resources will be forever dedicated to cleaning a database and the problem will never go away. As the author says, “Any form of clean-up without prevention is wrong-headed.”

In Part E of the book, “Blocking and Tackling,” the author describes the elements of a successful data quality system and how those tasks are accomplished. While you may not want to follow his solution or methods exactly, the book does provide a lot of ideas to consider as you work to improve data quality in your organization. The author makes the point that you need to consider all costs of errors—the immediate cost and the cost to those downstream and you need to know where errors occur.

A “statistical control process” is described in Chapter 23. The process as presented is ever-vigilant, focusing on continuous improvement and bottom line impact.

Another point the author makes is that “I” (information or data) is not “IT” (information technology). It is clear from the book that one should not use IT to automate a poorly designed information chain. An information chain, as defined by the author, is an “end-to-end process that starts with original data sources, creates ‘information products,’ and continues through to the use of data in operations, decision-making, and planning.” The author recommends first improving the information chain and then automating it, using IT to reduce costs and to free up people for other tasks: IT plays a subordinate role.

The author also presents other concepts in the book that may be more applicable to the data manager such as: a business case for data quality; the competitive advantage derived from data quality; techniques for cleaning a database; and the common elements of a successful data quality program. Reading through these sections should help practicing actuaries

# Working with What You Got— A Question of Data Quality

*Editor's Note: This article is part of a series written by members of the CAS Committee on Professionalism Education (COPE). Its intent is to stimulate discussion among CAS members. Therefore, positions are sometimes stated in such a way as to provoke reactions and thoughtful responses from the readers. Responses are welcomed. 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.*

Kerry Komplete, FCAS, MAAA, works as an analyst for Advanced Actuaries, LLC, a large consulting organization. For each of the past five years, Kerry has performed an annual reserve review for GLRUS Inc., an insurer that provides liability coverage to mid-tier commercial clients. GLRUS is one of Advanced Actuaries' oldest and best clients. However, Kerry has been increasingly concerned about the financial position of GLRUS over the last few years.

As she does every year, Kerry requests updated data from GLRUS and places her annual call to Joe Honest, VP of claims, to find out if there have been any changes in claim handling. Joe tells Kerry that GLRUS laid off a large number of claims handlers about a year ago. Kerry expects the total annual payments and case reserve adjustments to be affected by this, but her initial review of the data does not show anything out of the

ordinary. Knowing that the total reserve liability could be greatly affected by a change in handling if she uses the same factors and methods, and that the financial position of GLRUS is uncertain, Kerry decides to verify, quantify, and, if necessary, adjust for the change. That analysis requires additional data and additional time.


GLRUS tells Advanced Actuaries that the cost for obtaining the additional data is too high and that they will not provide it. They ask Kerry to work with the data that she has already received. In addition, they respectfully ask that Kerry try to keep her billable hours close to last year's level since they are trying to keep costs down during a difficult time.

## **Should Kerry complete the analysis with the current data provided?**

### **Yes**

Kerry's initial review of the data did not show anything out of the ordinary. Considering that GLRUS is struggling financially, it makes sense that they would try to avoid any additional overhead expenses associated with Kerry's analysis. GLRUS has been one of Advanced Actuaries' best clients. Kerry should respect their request and make do with the data that she has received. She can communicate her concerns in her report and make a note in the file to watch for future changes in the data.


### **No**

Actuarial Standard of Practice #23, "Data Quality," indicates that an actuary should decline to complete an assignment if appropriate data cannot be obtained and "if, in the actuary's professional judgment... the data are so inadequate that the data cannot be used to satisfy the purpose of the analysis." She has been told about a change in claim handling practice. She knows that such changes affect the reserve analysis. Without the additional data, Kerry is unable to consider this fact, nor is she able to provide her "best estimate," which she has an obligation to provide. In addition, since the GLRUS financial position is tenuous, a small change in the point estimate could have a significant impact on the policyholders. She needs to be sure that the data is acceptable. According to Precept 1 of the Code of Professional Conduct, actuaries have a responsibility to the public, not just their principals. 

## **The Bookshelf,** From page 16

improve their communications with the data managers in their organizations.

Throughout the book, the author presents seventy-one "tips." For ease of reference, sixteen of the most important tips are repeated at the end of the book and reorganized according to several subjects. A glossary of terms is also provided at the end of the book.

Overall, the book is a quick read and presents many concepts in an easy-to-understand fashion for the practicing actuary. I recommend it to anyone with a stake in improving data quality. 



## A Passion for Softball

**H**ow does a man recapture his youth as he ages? For Jerry Miccolis it is by competing in organized softball leagues. As the motto of the Softball Winter Camp he annually attends puts it, “You don’t stop playing because you grow old; you grow old because you stop playing.” When he is playing third base or shortstop and has to react instantly to a one-bounce smash without having time to remember his physical limitations, dive to his left, scoop the ball up on the short hop, get his feet under him, then spin and fire to first, he gets a feeling like none other (at least nothing appropriately mentioned in a professional publication). After the fact, he doesn’t realize how he made his body do those things. It’s just old instincts coming back. Before the first pitch of each game, he stands at his position, closes his eyes, raises his glove to his face to smell the leather, puts his head back to feel the sun, and realizes how very lucky he is to still be able to do this at 56 and counting.

After Jerry changed careers in 2003 from enterprise risk management to personal wealth management, he found time to pursue outside activities. When his wife’s uncle invited him to join his 50-and-older

team, he thought it was going to be nothing more than a beer league with a bunch of old fat guys. He was going to show them a thing or two. Instead, he was very surprised to find out how competitive the league was, how fit and athletic the men were, “how truly pathetic my own skills were,” and how easy it was to get hurt doing things he hadn’t done in 20 years. He learned a few lessons the hard

way in his first year, with pulled hamstrings, torn quads, and a strained shoulder among his aches. While softball itself isn’t much exercise, the sudden movements in the field and on the base paths make it necessary to be in good physical condition. It motivated him to go regularly to a health club, even during the winter.

Jerry now plays in two leagues (down from four last summer, which was “insane”—it was like a second full-time job). One over-

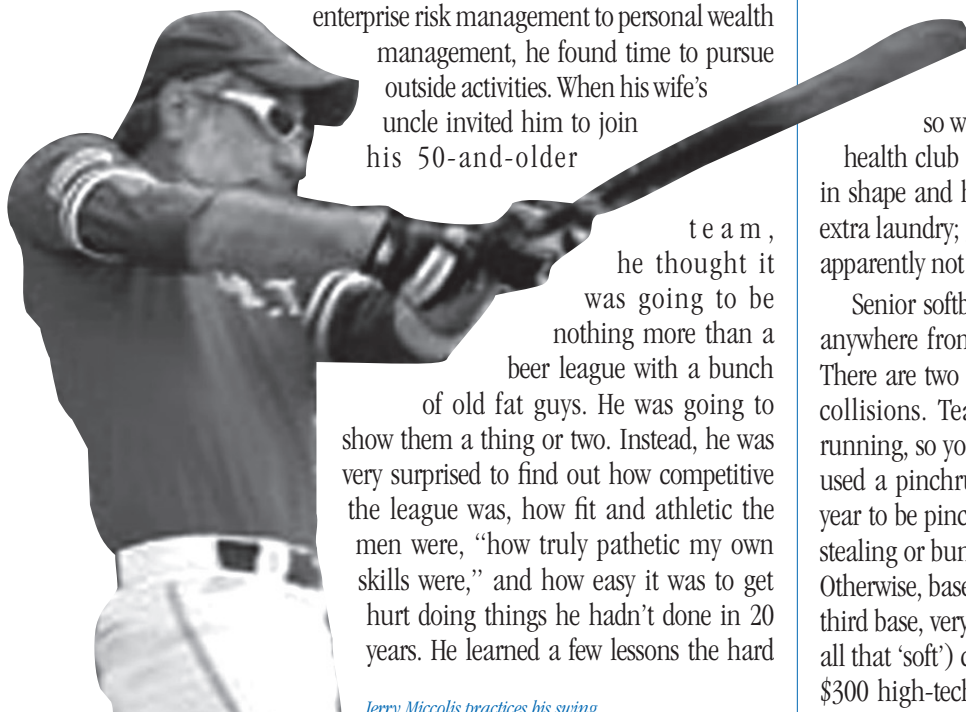
50 league plays double-headers every Saturday morning; another over-30 league plays weeknights. He thus plays three or four games a week. The games themselves are about an hour-and-a-half. But the older he gets, the longer it takes to stretch and warm up before the game, about half an hour now. It also takes a while to get “armored up” to play. The gel-filled toe

caps, the ankle braces, the reinforced spikes, the sliding pads, the compression shorts, the tendonitis straps, the prescription goggles, the Advil loading, etc., adds another 20 minutes. His wife, Marcella, calls herself a “softball widow” during the summer, but with her own passionate pursuits, she is very supportive of his softball addiction. She tells friends that she is delighted to see him doing something that gets him out in the fresh air with his buddies, doing something

so wholesome that he clearly loves. Since they go to the health club together, he provides her extra motivation to keep in shape and healthy. Her only real complaint is the amount of extra laundry; getting dirt and grass stains out of baseball pants is apparently not easy.

Senior softball makes a few concessions to old age. Bases are anywhere from 65 to 75 feet apart, depending on the league. There are two home plates and two first base bags, to minimize collisions. Teams are allowed free substitutions and pinch-running, so you don’t have to come out of the game once you’ve used a pinchrunner. Jerry found it pretty humbling in his first year to be pinch-run for by somebody 20 years older. There is no stealing or bunting. And a foul ball with two strikes is a strikeout. Otherwise, baseball rules apply. And as Jerry says, “When you’re at third base, very close to the batter, and the ball (which really isn’t all that ‘soft’) comes screaming at you at 90+ MPH off someone’s \$300 high-tech composite bat, that ball certainly doesn’t make

**“For  
a scrawny actuary  
to be able  
to keep up with  
these jocks  
is a real kick.”**



*Jerry Miccolis practices his swing.*






*Jerry Miccolis (kneeling, second from right) poses with the teammates of one of his many softball teams.*

any concessions to your age.”

Jerry finds the overwhelming majority of the players to be great guys who are just out to compete and have fun. “There’s something about amateur athletics that attracts people with healthy minds as well as bodies. Unlike me, most of the guys I play with have been athletes their whole lives. They’ve played non-stop since little league, and some have even played professional ball. Most have had physically demanding jobs, too. So, for a scrawny actuary to be able to keep up with these jocks is a real kick.” Jerry kids his jocks-since-childhood teammates that their skills are eroding while his, due to his 20 years away from the game, are marginally improving.

Every February, about 100 over-50-year-olds from all over the country descend on Altamonte Springs, Florida (near Orlando), for Softball Winter Camp, a week of tournament softball run by Active Lifestyles, Inc. The facilities are world-class. There are doubleheaders every day. For Jerry it’s a great break from the New Jersey winter and always a great time. Some of the players are very good; others haven’t played in a long while, but received the trip as a gift from their wife or girlfriend. You spend all day with these guys, go out to dinner together, and really get to know them. Some, along with their wives, have become great personal friends. (Some have even become his clients, but that’s beside the point.) It’s just a wonderful experience, one he hopes to continue for another 20+ years. Last year Jerry received the Most Improved Player Award.

One of his teammates at winter camp last year was Jimmy So, an 80-year-old Tokyo native who’s lived in California for several decades now and just picked up the game a couple years ago. “Not the best ballplayer, but a very nice gentleman. A few guys in the dugout were comparing their Viet Nam War experiences and someone pointed out, ‘You know, Jimmy served in World War II!’ We reflected on that respectfully for a while until, inevitably, one wise guy said, ‘Oh yeah, what side?’ Gives you some perspective. Time and international sports heal all wounds.”

Jerry Miccolis, CFA, CFP, FCAS, is a Principal of Brinton Eaton Wealth Advisors. 

25 Years Ago in *The Actuarial Review*

## A Pledge for New Members?

By Paul E. Lacko

*That was the title of “From the President” in August 1983. CAS President Fred Kilbourne wrote that the CAS Board of Directors was considering a proposal to institute the following pledge for new members:*

As a member of the Casualty Actuarial Society, I will

- Strive to maintain the honor and integrity of my profession and of the Society,
- Endeavor to meet the highest standards of professional conduct,
- Contribute to advancing the knowledge and principles of actuarial science, and
- Be ever mindful of my responsibility to serve the public interest.

*He continued:*

Let me be the first to go on record as being opposed to pledges...in general I can’t find much good to say about pledges as such. But the substance of pledges is another matter. Consider the proposal above. I might prefer that the rankings be reversed, but I don’t seriously quarrel with the ideas...

So I’m left with the dilemma of promoting the substance of the proposed pledge while at the same time not wishing to foment its implementation. Ideas that come to mind include the possibility of an exam part dealing with ethics—and perhaps as well with such matters as professional standards, interpersonal skills, management, and communications. Or perhaps the same subjects, but with the vehicle being workshops or papers or this esteemed newsletter...And while we’re at it, the idea that the subject at hand should not be exclusively the interest of new members alone.

*Actuarial Review editor Matthew Rodermund agreed wholeheartedly in his “Reflections” column:*

In our opinion, words of this sort are too easy to mouth... Probably the most devout pledges a lot of us ever utter are marriage vows, but, judging by the divorce rate, those seem to be singularly unsuccessful. We suggest that newlyweds, or citizens, or underwriters, or actuaries, need deeper commitments than those imposed by a pledge.

25 Years Ago, page 20

# CAS Contributes \$22,500 to Support Actuarial Research Projects


**T**he Actuarial Education and Research Fund (AERF), which is administered by The Actuarial Foundation, supports actuarial research by funding projects. The CAS has joined the Actuarial Foundation in cosponsoring an annual competition for research grants and this year has contributed \$22,500 to help fund grants for promising research projects that would have a positive impact on the property and casualty field.

In response to its 2008 Individual Grants Competition, the AERF received many interesting and worthwhile proposals. The CAS AERF Grants Task Force, which is chaired by Leslie Marlo, reviewed some of these proposals and recommended that the CAS support the following researchers:

- Katrien Antonio, Jan Beirlant, and Rob Kaas for research on “Stochastic Claims Reserving: Micro Models for Run-off, Incorporating Expert Opinion, and the Interaction with Extreme Value Methodology.”
- Vytautas Brazauskas for research on “Robust and Efficient Methods for Quantitative Risk Management.”
- Luyang Fu for research on “Optimal Layers for Excess Catastrophe Loss Reinsurance.”
- Joseph H.T. Kim and Mary R. Hardy for research on “Estimating Allocated Capital Using the Bootstrap.”
- Maria L. Rizzo for research on “New Goodness-of-Fit Tests for Pareto Distribution.”

“This is the first full year the CAS has been equal partners with the AERF and the Society of Actuaries’ Committee for Knowledge Expansion in this effort and we are excited about these results. This competition is a great way for the CAS to promote research to benefit our members. We encourage those with ideas for advancing casualty actuarial science to consider submitting proposals next year,” says Roger Hayne, CAS Vice President of Research and Development.

Details on the 2009 Individual Grants Competition will be available on the Actuarial Foundation Web Site ([www.actuarialfoundation.org](http://www.actuarialfoundation.org)) soon. The results of the 2008 research projects will be made available to CAS members.

As with foundations in general, the Actuarial Foundation is happy to accept donations not only to further the efforts of the AERF but also to aid in other worthy efforts. 

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## 25 Years Ago, From page 19

*A pledge does not and cannot impose commitment. The spoken words of a pledge merely express commitment and affirm it. If the deep commitment does not already exist, then reciting a pledge full of empty words does, at best, no good at all. When the deep commitment does exist, then reciting the pledge on special occasions can be beneficial to both the members and guests. The pledge got a bum rap. Maligned and disparaged in the Actuarial Review 25 years ago, it deserves more respect than it received.*

As a member of the Casualty Actuarial Society, I will strive to maintain the honor and integrity of my profession and of the Society, endeavor to meet the highest standards of professional conduct, contribute to advancing the knowledge and principles of actuarial science, and be ever mindful of my responsibility to serve the public interest.

*It's the “CAS Statement of Principles” in fewer than sixty words. *

# “Ask an Actuary”

## New Advice Column Helps You Navigate Life’s Difficult Problems

### Dear Ask an Actuary:

I am an actuarial student working for a large insurance company. Recently, I was reviewing some LDF patterns that were increasing sharply and brought it to the attention of my supervisor. Unfortunately, he has very long, thick nose hairs that are rather distracting to me and worse yet, he plays with them while he is thinking. Then, he’ll touch the page, pointing at numbers with his finger that was basically in his nose! Believe me, I am not the only co-worker who notices and is put off by this. We are concerned, but what can we do about this?

*Concerned in Illinois*

### Dear “Concerned:”

You have good reason to be concerned! Sharply increasing LDFs can be caused by a number of factors: changing payout patterns, new claims handling procedures, industry trends, etc. If you believe the issue is real and not a data problem, you should also talk to the claims people and tell them what you’re seeing. Most likely, they will have an explanation that you will have to consider in your analysis. Don’t forget to keep studying so you can pass those exams! Good luck!

### Dear Ask an Actuary:

I am an actuarial student and I am having a difficult time balancing my personal life with my study time. All my friends from college are going out and having a good time evenings at the local bars and on weekends they all go up to Boston or NYC for clubbing. I feel like I am drifting away from them because I have to turn them down so often. What can I do to help them understand that I’d like to go with them, but can’t?

*Library-Bound in Connecticut*


### Dear “Library-Bound:”

Balancing study time is very difficult for new students and you undoubtedly have many questions. Some of the more common questions I’ve heard often are:

- “Can I really afford to sleep right now?”
- “Should I study for Part 5 AND Part 7 or just focus on Part 5?”
- “I haven’t eaten for six hours now because I’m studying in a library... can I make it another six hours or should I pack up all my stuff and find a late-night diner for a quick bite?”
- “Do I have to waste time showering or can I go until the next weekend?”
- “I’ve been studying for several days straight and I don’t know what day it is. Should I run out and buy a watch that can tell me or just get a newspaper?”

Unfortunately, the correct answers to all of these questions are more questions:

- “Who cares what day it is?”
- “Who cares what you smell like?”
- “Do you really want to be known as a failure all your life?”
- “How do you even have time to write letters asking me for advice? Get back to studying!”

Look, the best smell of all is the sweet smell of success which will be yours all the sooner if you stop whining about trivial details and get back to work studying! I know you’ll thank me later. Good luck on those exams! 

# Lessons Learned Over an Actuarial Career

By C. Robert Spitzer

I shall be retiring from the actuarial profession in a few months, and want to share some of the nuggets of wisdom I have acquired over the years. The items in this list are in no particular order, and are only related by the fact that each item makes me smile when I think of it. My thanks go to everyone for whom, and with whom, I have worked.

1 I have worked for five property/casualty insurers, with each new employer smaller than the one before. I recommend that path, as it allowed me to learn from a larger group of associates, then get more hands-on time in the smaller environment.

2 When you interview for an actuarial position and the prospective boss is not an actuary, ask what he or she believes the actuary's job is. If the answer is vague, look for another employer.

3 Honesty with superiors is not always the best way to stay employed, but sometimes getting fired before the corporate roof caves in is not so bad.

4 Get involved in committees, either industry-wide (rating bureaus, residual markets,) or professional (CAS, AAA). They provide a network of contacts that many of the other insurer divisions (underwriting, accounting, IT) do not because those have so many more members to handle. Committees can also provide a sense of belonging when you are the only actuary employed at an insurer.

5 When you are a "company" actuary with a project to complete on a tight deadline that requires new and unusual formulas or procedures, try calling the actuary at your auditor's firm for advice. He or she will likely already have done fifty of these projects and has an interest in your getting it right.

6 Numbers quoted by agents and program administrators are always multiples of five. "The new program will bring in \$5 million in premium or \$25 million." That way they can easily calculate their commissions.

7 Lawyers, on the other hand, will tend to quote numbers that are easily divisible by three. (Speaking of three, it is astonishing how often "three" has turned out to be a correct answer to questions I have been asked where I had no time to think even of how to derive an answer.)

8 Auditors can be distracted easily. Schedule a meeting in a conference room with a blackboard. Then, before they arrive, fill the blackboard with numbers and formulas. Then, just as the auditors come in the door, lean over and erase one number. They will focus on that space for an hour.

9 Not everyone thinks actuaries are geniuses. People with other jobs have a point of view, too. If they are the people who have to implement the actuary's idea, then they really need to get a chance to say their piece.

10 If you happen to have the chance to supervise others, take it seriously. People's lives tend to be more important and urgent than numerical calculations, despite what your boss says.

All the best,  
Bob Spitzer

*C. Robert Spitzer is a managing actuary soon to be retiring from the New Jersey Department of Banking and Insurance. **AR***



# CAS To Launch A New Type of Publication

## Plans for Monographs Underway

The CAS Task Force on Publications and the Publications Implementation Task Force developed recommendations to improve CAS publications and better meet the needs of our expanding casualty actuarial profession. Thus was born the idea of producing CAS Monographs.

CAS Monographs are detailed, scholarly works on either narrow topics or groups of related subjects. The topics must be relevant to actuarial and related fields, of lasting value, and considered significant by offering important new insights on topics of interest to CAS members and other professionals. CAS Monographs will emphasize practical research while also inviting the exploration of new and challenging ideas in the expanding endeavor of managing uncertainty.

A journal article typically describes a specific innovation or insight. A CAS Monograph is expected to cover a broader subject area or several related innovations and insights. A textbook

generally covers a broad range of related topics in moderate depth. In contrast, a monograph is expected to be more in-depth, more focused, and more succinct.

The Monograph Editorial Board headed by Manalur Sandilya has already begun to evaluate submissions, interact with authors, and develop a pipeline of submissions. Mr. Sandilya is a longtime CAS volunteer who has most notably served on the CAS Syllabus Committee as its chairperson. Currently the Monograph Editorial Board is formulating submission guidelines for potential authors, and you will soon see a Monograph information page on the CAS Web Site.

Monographs have no set publication schedule. The Monograph Editorial Board will publish approved monographs upon their completion.

For more information on CAS Monographs, see upcoming weekly e-mail bulletins and visit the CAS Web Site. [AR](#)

## Spring 2008 Issue Now Available



## Submit Your Paper to Variance

*Variance* offers an unparalleled platform to expose your ideas and research to risk professionals worldwide. Please submit your manuscript today!

Papers on a variety of subjects are welcome, but they should meet the following standards:

1. The topic selected must be relevant to casualty actuarial science.
2. The subject matter must fit into one or more of the following categories:
  - Research—contains original ideas or new material
  - Educational—for actuaries or others involved in the analysis, modeling, or management of risk
  - Practical—provides synthesis of existing distinct processes, solutions to substantive problems, expositions of actuarial practices, compilation of current techniques, or other practical applications.

Additionally, the journal does not usually accept papers that exceed 10,000 words. The complete guidelines and submission instructions can be found on the *Variance* Web Site, [www.variancejournal.org](http://www.variancejournal.org). [AR](#)



# To Dream

I dream of the CAS being a world leader in the management of uncertainty (risk and opportunity) in the property and casualty industry and in other industries as well. I then imagine how this dream can be achieved. Another way to look at this dream is to view it as the fulfillment of the CAS Centennial Goal—expertise in ratemaking, reserving, capital modeling, and Enterprise Risk Management (ERM)—with a little more included for good measure.

How do we achieve this? Where should our members be in 2014 (the CAS Centennial Year), or in 2020? Ideally we'll be where the market will be, not where it is today. A good starting point is the Strategic Planning Committee. The committee will attempt to forecast market needs and the requisite research and development to meet these needs. They will coordinate their efforts with the Research Committees and the Risk Management Committee.

As the world continues to shrink, the CAS will be a world leader or a follower. There will be nothing much in between. Being a leader in North America will not mean much within a global profession embedded within a global economy.

The CAS will need to conduct substantially more research into reserving, ratemaking, securitization, enterprise risk management, and other subjects that we have yet to focus on. We will have the opportunity to identify and develop solutions to problems as they arise. At its June meeting, the CAS Board increased the research budget substantially. But it will not be enough to achieve our ambitious research objectives.

The research results will form the basis for future actuarial education—both basic and continuing. We will commission others to turn these research results into quality study material as we are doing with the ratemaking and reserving material. This will be an expensive effort. In addition to presentations at meetings and seminars, continuing education opportunities will be increased at CAS Regional Affiliate meetings and through Webcasts to meet expanded practice requirements.

The existence of world-class research and educational

material will enable the CAS to promote its members as problem solvers in the management of uncertainty. This effort will also entail significant expenses.

The CAS will explore ways to raise substantial revenue to fund these research, education, and marketing initiatives. Collaboration with others will provide an alternative approach, mitigating the need for additional CAS funding. For example, the CAS will work with the Joint Risk Management Section and academic groups, such as Enterprise Risk Management Institute International (ERM-II), to conduct research and develop educational material. Working with the Canadian Institute of Actuaries (CIA) and the Society of Actuaries (SOA), the CAS will explore increased use of university education, possibly for a global

ERM designation. The CAS has recently been working with the SOA on a marketing campaign to change the image of the actuary and to promote actuaries for new roles, such as chief risk officer.

The American Academy of Actuaries (AAA) and the CIA will advance the actuarial profession by speaking out on important items of public interest. The AAA and the CIA will train international

representatives of Canadian and U.S. actuarial organizations with regard to diplomatic issues and skills.

And collaboration will extend beyond North America. The CAS will be a leader in working with general insurance actuaries from Australia, the United Kingdom, and other countries to develop actuarial solutions to emerging problems. CAS volunteers will scour research and educational material from other countries to be used in the CAS educational process. And CAS educational material will be available to other actuarial organizations for their educational use. In short, the CAS will have world-class educational material by accessing the best information available, regardless of the source, while conducting research with other general insurance actuaries to address outstanding problems. This will challenge the CAS to enhance its international relationships. The CAS will work with the AAA and the CIA to monitor Solvency II, International Accounting Standards Board (IASB), and other developments

**As the world  
continues to shrink, the CAS  
will be a world leader or a  
follower. There will be  
nothing much in between.**

that could affect its members, wherever they practice.


As CAS membership and relationships grow in China, Taiwan, and other countries and territories, the CAS will enhance services to its members and other general insurance actuaries located outside of Canada and the United States.

Collaboration will not be limited to other actuaries. The CAS will work with other professionals to develop solutions to problems involving uncertainty. This will establish or reinforce the value of actuaries in dealing with these problems. For example, actuaries will collaborate with others to demonstrate their valuable contributions to the team approach necessary for managing enterprise-wide risks.

Let us not overlook the contributions of CAS volunteers, the most critical element of CAS success. None of the above

will happen without an expanded volunteer effort. Volunteer opportunities will be more diverse, flexible, and possibly more customized to the individual. Those who cannot readily travel will be able to review material from other countries for use in CAS educational material. The CAS Executive Council will regularly seek input from the New Members Committee.

Growing numbers of retired or retiring actuaries will maintain their mental acuity by staying involved in CAS activities. Seasoned actuaries will mentor future leaders of the CAS and other actuarial organizations as the CAS establishes a process to focus specifically on developing future leaders.

We invite you to be one of the volunteers that will make this dream a reality. 

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## CAS Board Issues Statement Following Member Convictions

*The CAS Board of Directors issued the following statement to the CAS membership on May 14, 2008.*

### **Statement from the CAS Board of Directors**

On February 25, 2008, five senior insurance executives, including two members of the Casualty Actuarial Society (CAS), were convicted in United States federal court on multiple counts of securities fraud and conspiracy. The executives have indicated their intention to appeal the convictions. However, the CAS Board of Directors decided that it is appropriate at this time to communicate how the CAS leadership is addressing this matter.


By action taken at its March 2008 meeting, the CAS Board of Directors has asked the Actuarial Board for Counseling and Discipline (ABCD) to investigate whether CAS Fellows Ronald Ferguson and Christopher Garand violated the Code of Professional Conduct. Depending on the results of the ABCD investigation, the CAS will then consider appropriate action in consultation with legal counsel and in accordance with the CAS Bylaws and Rules of Procedure for Disciplinary Actions, being mindful of potential conflicts of interest that may arise in this matter, confidentiality requirements, and all applicable “due process” protections as set forth therein.

CAS members may be aware of the existence of a letter signed by a number of actuaries seeking leniency by the court in the sentencing of one of the convicted CAS members. The letter was

not sanctioned by the CAS and is not an official statement of the CAS or the CAS Board. It represents the personal opinions of those who signed it.

The CAS is founded on high standards of professional conduct and practice. Every CAS member has the responsibility to practice in accordance with the Code of Professional Conduct, which is shared by all of the United States-based actuarial organizations. The CAS Board has taken its action solely to further and preserve the integrity of the Code of Professional Conduct.

CAS members who have questions regarding the appropriateness of their actuarial work are strongly encouraged to seek counsel from the appropriate body in the jurisdiction where they practice. For CAS members practicing in the U.S., the ABCD provides confidential guidance to actuaries who ask for assistance in interpreting and complying with the Code and/or actuarial standards of practice.

The Code of Professional Conduct and information about the ABCD can be found on the ABCD Web Site at <http://www.abcdboard.org/>. The CAS Bylaws and Rules of Procedure for Disciplinary Actions can be accessed on the CAS Web Site ([www.casact.org](http://www.casact.org)). 

# Actuarial Foundation Update

## Midwestern Actuarial Forum Makes Generous Pledge

For a second year, The Midwestern Actuarial Forum has pledged to match all donations made to The Actuarial Foundation by its membership between April 1, 2008, and December 31, 2008, up to a maximum contribution of \$5,000.

Double the impact of your gift—make a donation to support Foundation programs and activities today!

Donate online at [www.actuarialfoundation.org/donor/donor.htm](http://www.actuarialfoundation.org/donor/donor.htm). For more information about The Actuarial Foundation, visit [www.actuarialfoundation.org](http://www.actuarialfoundation.org).

## Project Math Minds Scholarship Winner Announced

The Actuarial Foundation is pleased to announce that Bryan Taylor McMeen of Virgil I. Grissom High School in Huntsville, Alabama, received a \$5,000 Project Math Minds Scholarship for his project titled “A Statistical Analysis Regarding the Projected Growth of Worker’s Compensation Insurance.”

The Project Math Minds Scholarship is a new and unique scholarship opportunity that highlights the high-level math skills used by the actuarial profession. The Actuarial Foundation has joined with Mu Alpha Theta and National High School and Two-Year College Mathematics Honor Society to implement Project Math Minds. Students compete for college scholarship money provided by The Actuarial Foundation.

Project Chair Jeremy Fogg was pleased with the results saying, “The actuarial field is the science and art of analyzing information that has complex relationships to assist financial planning for the near future. We were pleasantly surprised with the quality of work submitted by Mr. McMeen. He is proof that our youth are capable of using technology to analyze a large amount of data, providing a reasonable recommendation and solid support justifying his recommendations.”

For more information about Project Math Minds visit [www.actuarialfoundation.org/youth/math\\_minds.html](http://www.actuarialfoundation.org/youth/math_minds.html).

## Meet the Foundation’s New Trustees

The Actuarial Foundation welcomed nine new trustees to the Foundation’s Board of Trustees. To find out whom they are and to learn more about the Foundation, check out the latest Foundation newsletter at <http://www.actuarialfoundation.org/news/newsletter/final0408.pdf>.

## Results Indicate Improved Attitude Toward and Interest in Math—Thanks to Actuaries!

The Actuarial Foundation is finding that schools who implemented Advancing Student Achievement programs with actuaries as mentors are seeing improved attitudes towards math, increasing math scores, increasing interest in the actuarial field as a career, and many more powerful results!

Check out the Foundations Web site [www.actuarialfoundation.org/youth/call\\_for\\_mentors.htm](http://www.actuarialfoundation.org/youth/call_for_mentors.htm) to see if there is an Advancing Student Achievement math mentoring program in your area or contact the Foundation at [asa@actfnd.org](mailto:asa@actfnd.org) to find out how to get one started.



While you are attending the Casualty Loss Reserve Seminar, join us on Thursday evening, September 18 in the Omni Shoreham, for an evening filled with fun, food, entertainment and prizes.

Enjoy an evening with friends and colleagues in support of a good cause as guests of our corporate sponsors. Play recreational poker, blackjack, craps, and roulette; enjoy hors d'oeuvres, an open bar and

special desserts. In addition, you will be amazed by Bill Malone, C.E.O. (Chief Entertainment Officer) of Comedy Magic. Also, be sure to take a chance at winning many fabulous prizes—they’re really BIG!

Space is limited: reserve your place at the table today!

A donation of \$25 is appreciated, but not required. All donations support programs and initiatives of The Actuarial Foundation to enhance achievements in mathematics for students across the country.

To register online and to make a donation, visit [www.actuarialfoundation.org/charity\\_event.htm](http://www.actuarialfoundation.org/charity_event.htm).

For more information, call The Actuarial Foundation at (847) 706-3535 or send an e-mail to [CASevent@ActFnd.org](mailto:CASevent@ActFnd.org).

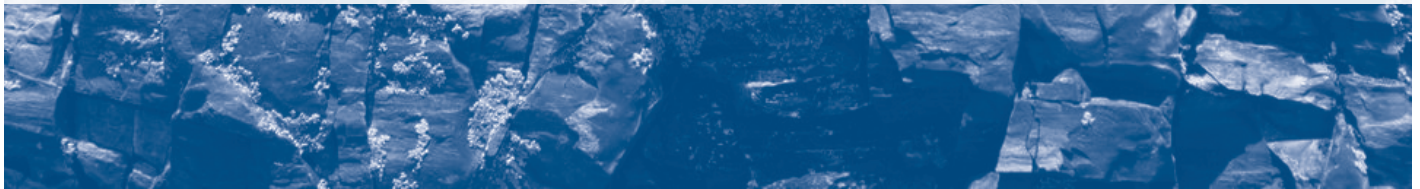




## Tom and Don

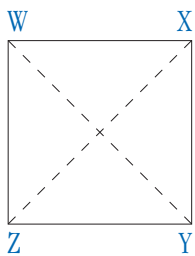
Eons ago I used to hang out with some geologists. One night, over dinner, Professor Tom told Dr. Don about an interesting conversation with a student that afternoon. Tom said he had recovered some sedimentary rock from a site, but a careless assistant had moved it, and he was having trouble determining the rock's original orientation.

All that Professor Tom wanted to know was the orientation of a vertical axis; which way pointed up or down did not matter. A student noted that because the rock had numerous small flecks of another mineral, they could be used to determine the orientation. The student suggested that the flecks were probably initially distributed at random, but, over epochs as the rock was compressed by pressure from above, the flecks would have moved closer together vertically, but not horizontally. So the current distribution of the flecks could be used to determine the rock's original orientation. Professor Tom gave Doctor Don a critique of the student's idea. What did Professor Tom think?



### Who Stole the Book?

The puzzle was based on reports of students, pairs of whom might or might not have been in a library at the same time. Eric Savage's solution was based on the following observation. If W, X, Y, and Z are such that W and X were in the library at the same time, as were X and Y, Y and Z, and Z and W, then either X and Z were in the library at the same time, or W and Y were (or both). To see this, suppose W left before Y arrived. Then X and Z must have both been in the library between the time W left and Y arrived. Other possibilities are handled similarly.

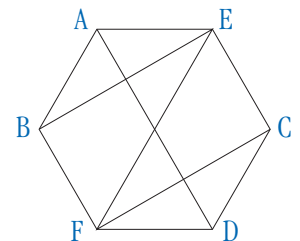


According to the student reports, Alice and Bob, Bob and Frank, Frank and Doris, and Doris and Alice were (pairwise) in the library simultaneously. One of these reports must be wrong because neither Bob and Doris, nor Alice and Frank were in the library simultaneously. Also, Alice and Doris, Doris and Charlie, Charlie and Eve, and Eve and Alice were in the library simultaneously. But neither Alice and Charlie nor Doris and Eve were in the library at the same time. Finally Alice and Doris, Doris and Frank, Frank and Eve, and Eve and Alice, but not Alice and Frank nor Doris and

Eve were in the library simultaneously. These contradictions are all eliminated only if Doris and Alice were not in the library simultaneously. As Doris reported seeing Alice, and not vice versa, Doris must be lying to try to frame Alice.

Additional solvers for May's puzzle are David Atkinson, Christopher L. Cooksey, John Herder, John Jansen, Alex Kozmin, Rita Kwok, Tony Milano, Christopher Mosbo, Jayesh Srivastava, Sonja Uyenco, David Uhland, and Gary Venter.

Eric Savage also sent in a solution to the February 2008 *AR* Puzzlement. 



# The SOA Joins the CAS as an ERM-II Sponsor

## ERM-II to Work with the JRMS

By Wayne Fisher, ERM-II Executive Director

**T**he Enterprise Risk Management Institute International (ERM-II) is pleased that the Society of Actuaries Board of Directors has agreed that the SOA will be a sponsor of ERM-II, joining the CAS and the Institute of Actuaries of Australia as sponsors. The board's decision followed a favorable recommendation by a committee chaired by Steve Kellison, which called for the continued development of ERM-II. The Kellison committee also recommended that the Joint Risk Management Section (JRMS) provide the on-going, working relationship with ERM-II.

ERM-II will work with the JRMS to identify topics where research would be valuable, identify ERM-II members with an interest in pursuing these subjects, and develop and agree on research proposals and funding, as appropriate. Similarly, ERM-II members may submit research proposals to the JRMS for consideration. CAS members are certainly encouraged to submit

ideas as well.

ERM-II continues to co-sponsor and participate in ERM-related research activities. In April, ERM-II co-sponsored a timely research workshop on market liquidity with Columbia University, an ERM-II member institution. Among the researchers presenting their work, ERM-II Board Member Donald Mango of Guy Carpenter & Co. presented "The Reinsurance Market: An In-Depth Look at a Low Liquidity Market for Risk," an insightful discussion from a practitioner's perspective. (See sidebar for links to other presentations from ERM-II-sponsored meetings in the last year.)

Continuing its international focus, ERM-II has participated in two ERM research conferences with Wuhan University in the People's Republic of China. Preliminary plans are also under way for a research workshop this fall on commodity risk, with intent to demonstrate the value of ERM to firms outside the

### Links to ERM-II Research Presentations

Following is a listing of presentation at recent ERM-II-sponsored research workshops and meetings. For meeting agendas and links to the presentations, visit the ERM-II Web Site at [www.ERMII.org](http://www.ERMII.org).

#### April 2008—ERM Symposium Research Sessions

- Ser-Huang, University of Manchester, U.K., "Traunching and Rating"
- Samuel Cox, University of Manitoba, Canada, "Insurance Company Capital, Improving Skewness and Default Risk"
- David Li, University of Waterloo, Canada, "A Dynamic Competing Risk Model for Pricing Subprime Securities"

#### April 2008—Workshop on Market Liquidity, co-sponsored with Columbia University, an ERM-II member institution

- Michael Johannes, Columbia Graduate Business School, "Thoughts on the Liquidity Crisis"
- Til Schuermann, Federal Reserve Board, "Banks As Liquidity Providers of Second-To-Last Resort"
- Carlo Acerbi, Abaxbank (Italy), "A Coherent Formalism For Measuring Liquidity Risk"
- Doyne Farmer, Sante Fe Institute, "What Moves Prices? Thoughts on Market Impact and Information."

#### July 2007—Research Conference on Quantifying Diversification, co-sponsored with the University of Lyon, an ERM-II member


- ERM-II Scientific Director Shaun Wang, Georgia State, "Correlation Modeling and Parameters"
- Alexander McNeil, Heriot-Watt University, "Mixture Models of Dependent Risks"
- Steve Kou, Columbia University, "What is a Good Risk Measure?"
- Pablo Koch-Medina, Swiss Re, "When is Diversification a Benefit?"



# New Associates Honored at the CAS Spring Meeting

financial services arena. As plans are finalized, we will communicate them via the *Actuarial Review*.

ERM-II is a not-for-profit, academic and research organization. ERM-II members are academic institutions with graduate programs in actuarial science, risk management or financial engineering. Member institutions include Georgia State University, Columbia University, the University of Waterloo, the University of Lyon, the University of New South Wales, and Carnegie Mellon University. Last year, the University of Manchester also joined ERM-II.

ERM-II members, their colleagues and graduate students represent a solid, deep, and keen resource for advancing ERM research. ERM-II looks forward to working with the CAS and the JRMS to develop a meaningful flow of agreed projects and to advance our ERM knowledge. Please send ideas for research projects to [wfisher@ermii.org](mailto:wfisher@ermii.org) and I'll ensure the appropriate coordination. 

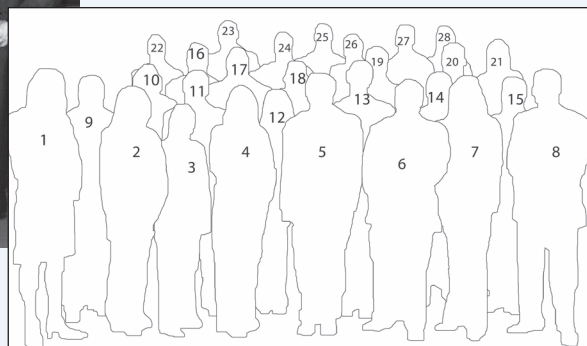


**Row 1, left to right:** Surender Sekhon, DuoDuo Cai, Elizabeth L. Cohen, Ian Greg Winograd, **CAS President Christopher S. Carlson**, Angelina Marie Anliker, Emily Christine Barker, Alanna Catherine Anderson. **Row 2, left to right:** Thomas W. Vasey, Jade Woodford, Heidi Leigh Sjoberg, Angela Myler Padilha, Josée Morin, Matthew Ryan Purdy. **Row 3, left to right:** Derek Parker Chapman, Andy Chang, Thomas R. Carroll, Matthew Miller Crotts, Jennifer Ann Kitchen. **New Associates not pictured:** Jennifer Leigh Edwards, Richard Brian Levy, Jennifer Lee Scull, Bradford John St. Pierre, David Chan Stanek, Christie Lai Yin Lee, Anne Elizabeth Youngers, Bin Yuan, Wei Zhang.



*New Associates stand as they are recognized during the 2008 CAS Business Session on June 16 in Québec.*

# New Fellows Honored at



1. Leanne Maria Cornell
2. Luyuan Chai
3. Tatyana Kerbel
4. Kelly Carmody Lewis
5. **CAS President Christopher S. Carlson**
6. Willie L. Davis Jr.
7. Laura M. Carstensen

8. Paul Andrew Ceaser
9. Yazeed Fadel Abu-Sa'a
10. Rebecca Joanne Armon
11. Alexandre Cung-Rousseau
12. Lauren Jill Cavanaugh
13. David R. Benseler
14. John R. Bower
15. Max Chiao

16. Joshua L. Fishman
17. Hugh David Hopper
18. Taher Ishaq Surawala
19. Timothy Joseph Fleming
20. Douglas James Busta
21. Danielle Richards Harrison
22. Todd Niel Gunnell
23. Travis James Grulkowski

24. Joshua S. Grunin
25. William Brian Johnson
26. John Robert Jasinski
27. Matthew E. Butler
28. James Richard Healey

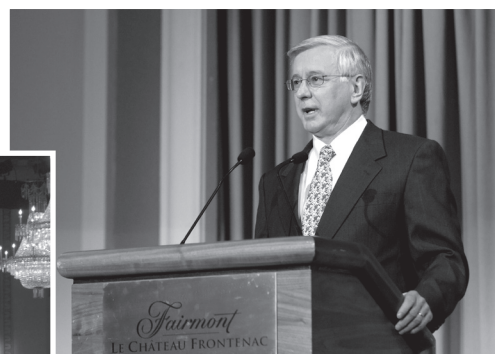


*Run Zheng receives her diploma from CAS President Chris Carlson. Ms. Zheng is one of 72 people who were admitted as CAS Fellows in June 2008.*

*A view of the stage in the Fairmont Le Chateau Frontenac's Salle de Bal, where the 2008 CAS Spring Meeting Business Session was held on June 16.*



## Scenes from



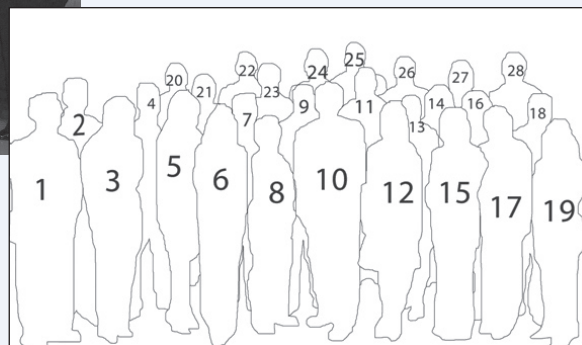
*CAS President-Elect John Kollar announces the new Fellows in a special ceremony during the Spring Meeting Business Session.*



# the CAS Spring Meeting



- |   |                            |
|---|----------------------------|
| 1. Tang-Hung Trang  | 11. Hua Lin                |
| 2. Joseph Gregory Pietraszewski                           | 12. Jacqueline W.Y. Shoong |
| 3. Lily (Manjuan) Liang                                   | 13. Sara Leclerc           |
| 4. Timothy M. Devine                                      | 14. Beth M. Sweeney        |
| 5. Kathryn Ann Walker                                     | 15. Erin Elizabeth Schaaf  |
| 6. Jennifer Lynn Meyer                                    | 16. Mary Vacirca           |
| 7. Rui (Victor) Min                                       | 17. Run Zheng              |
| 8. Eva M. Paxhia  | 18. Eric Lussier           |
| 9. Ebo Koranteng  | 19. Sheri Lee Scott        |
| 10. <b>CAS President</b><br><b>Christopher S. Carlson</b> | 20. Bradley M. Rolling     |



- |                           |                             |
|---------------------------|-----------------------------|
| 21. Alexander Kozmin      | 26. Christian Morency       |
| 22. Thomas Richard Slader | 27. Kandace A. Heiser       |
| 23. Stephen C. Williams   | 28. Louis Chi Wah Mak, FIAA |
| 24. Zhe "Robin" Li        |                             |
| 25. Isaac R. Espinoza     |                             |

New Fellows not pictured: Daniel Frederick Baxter, Sarah-Salimah Bhanji, Heather Rae Caffoe, Patrick J. Causgrove, Alastair Chapman (FIAA), Raul Cisneros, Kevin Christopher Conway, Sean O'Dubhain (FIA), Shams Munir (FIAA), Joseph A. Gage, David Scott Hamilton, Sheri Lyn Holzman, Laurel Yongtao Hu, David Michael Kaye, Sarah M. Kemp, Marie-Eve Nadeau, Kenneth James Meluch, Marc Lawrence Nerenberg, Kevin D. Roll, Patrick Shiu-Fai So, Benjamin J. Walker, Toby Wong, Richard A. Wood (FIA), Tong Xu.

# the 2008 Spring Meeting

*New Fellow Danielle Richards Harrison receives her diploma from CAS President Chris Carlson during the Business Session.*



*CAS Past President (2001-2002) Bob Conger (left) looks on while being introduced by current CAS President Chris Carlson. Mr. Conger delivered the address to new members.*

*New Fellow Will Davis (left) celebrates with wife and friends at special reception for New Fellows. Mr. Davis is joined by (left to right) his wife Ginger Davis, Bradley Carlson, Ann Carlson, and CAS President Chris Carlson.*



BOOKMARK THE  
ONLINE CALENDAR AT  
[WWW.CASACT.ORG/CALENDAR](http://WWW.CASACT.ORG/CALENDAR)

CAS

PROFESSIONAL

EDUCATION

CALENDAR

August 14-16, 2008  
43rd Actuarial Research Conference  
The University of Regina  
Regina, Saskatchewan, Canada

September 15, 2008  
CAS Reinsurance Limited Attendance  
Seminar  
Embassy Suites  
New York, New York, U.S.A.

September 18-19, 2008  
Casualty Loss Reserve Seminar  
Omni Shoreham Hotel  
Washington, DC, U.S.A.

October 06-07, 2008  
CAS Predictive Modeling Seminar  
The Westin San Diego  
San Diego, California, U.S.A.

November 16-19, 2008  
2008 CAS Annual Meeting  
Sheraton Seattle Hotel  
Seattle, Washington, U.S.A.

April 29, 2009- May 01, 2009  
Enterprise Risk Management Symposium  
Sheraton  
Chicago, Illinois, U.S.A.

## IN MEMORIAM

Donald R. Musante  
(ACAS 1986) April 19, 2008

Mark J. Sobel  
(FCAS 1979) May 8, 2008

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