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In My Opinion: Ballots Count—Vote in the CAS Election—Grover Edie—In the summer of 1948, the U.S. presidential election was over, all but for the formality of voting in the fall. Harry S. Truman, the Democratic president who had taken over the reins of government when Franklin Delano Roosevelt (FDR) died in 1945, was far behind his opponent in the polls. 7

Random Sampler: Learning—The Journey That Lasts a Lifetime!—Pat Teufel, CAS President-Elect—Some years, summer vacation has been a time of rest and relaxation, a time to recharge; other years, it has brought great excitement, as my family and I explored new places and tried new things. 9

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Ralph Blanchard, left, congratulates new Fellow Chad P. Wilson, who is accompanied by his wife Jamie and young son Remy. Mr. Wilson and other new Fellows were recognized at the 2011 CAS Spring Meeting.



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New Fellows by Mutual Recognition

Panayiotis George Skordi, FCAS, April 2011

Fellow, Institute of Actuaries (U.K.)

Lecturer, California State University 

New CAS Affiliate

Laura J. Bennett, AFFI

CEO, Embrace Pet Insurance

Beachwood, OH

Fellow, Society of Actuaries 


2011 CAS Spring Meeting Sponsors

The CAS appreciates the support provided by the sponsors of its 2011 Spring Meeting:

- Opening Day Luncheon and Lanyard—Milliman
- Tote Bag, Cyber Café, and Registration Insert—Pauline Reimer/Pryor Associates Executive Search
- Give-away and Registration Insert—Pinnacle Actuarial Resources, Inc.
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In addition, the following companies served as registration insert sponsors:

- Actuarial Careers, Inc.
- Barrie & Hibbert
- Ernst & Young
- Guy Carpenter & Company, LLC

The 2012 CAS Spring Meeting is scheduled for May 20-23 at the Arizona Grand Resort in Phoenix. Contact Mike Boa at the CAS Office (mboa@casact.org or 703-562-1724) for details on sponsorship opportunities for the 2012 event. 


2011 Seminar on Reinsurance Sponsors

The CAS appreciates the support provided by the sponsors of its 2011 Seminar on Reinsurance:

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- Reception Sponsor—Towers Watson
- Tote Bag, Cyber Café, and Registration Insert Sponsor—Pauline Reimer/Pryor Associates Executive Search
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- Lanyard Sponsor—Milliman

In addition, the following companies served as registration insert sponsors:

- Actuarial Careers, Inc.
- Barrie & Hibbert
- Guy Carpenter & Company, LLC

The 2012 Seminar on Reinsurance is scheduled for June 4-5 in Boston. Contact Mike Boa at the CAS Office (mboa@casact.org or 703-562-1724) for details on sponsorship opportunities for the 2012 event. 

Getting to the Right Answer



Question: “What is the difference between God and an actuary?”

Answer: “God knows that He’s not an actuary.”

(Joke overheard during my recent travels.)

Actuaries are typically involved in modeling or analyzing risks using faulty data—data that are both incomplete and error-prone. This data is from the past, but the present is different from the past and the future will be different from the present. We combine all this with subjective inputs from various sources, some of which are of uncertain reliability if not outright biased. If we then produce a single answer as a result, the only thing we know for certain is that the final outcome won’t match our answer. In other words, our answer will be wrong.

If the only assurance we have is that our answer will be wrong, where does the value from the actuarial analysis come from? How do we get to the “right” answer?

Perhaps we can get there by acknowledging that the real value of our work is not from the single answer that we may produce. The value instead comes from the understanding that arises from the analysis—the understanding of the options and the possibilities, the opportunities and the risks regarding the business decision to be taken. It is when this understanding is shared with the various decision makers (such as those in claims, underwriting, and ceded reinsurance) that the real value to the operation is achieved.

Yet many actuaries insist on focusing on the single answer. Why is this? What creates this blind spot for many in the profession?

Perhaps it is our training.

Nearly all actuaries excelled in math, from the early elementary grades right up through college. These math courses were typically focused on having us come up with the one right answer, and in nearly all cases there was only one right answer. The classroom training (at least the training that I had) rewarded those that were first to produce the one right answer. The focus was on speed and having the result represent your work—and only your work. If you needed help it was a sign of

reduced skill level. A math test was not a team event.

As a result, it should be no surprise that many actuaries focus exclusively on “the answer” when they communicate their work product to others. It should also be no surprise that they tend to defend this result against any and all doubters or naysayers, which no doubt provided fodder for the actuarial joke at the beginning of this column. This is what they’ve been trained to do (and selected for) since their early days in the classroom.

However, the business world is not the same as the classroom. In the world outside the classroom, success is usually measured on a group basis, not an individual basis. Actuaries need to be team players and recognize (and trumpet) the insights that were gleaned in their work towards an answer. The stronger actuaries are able to do this, adapting successfully from the classroom to the business environment. But how do we get more actuaries to successfully transition from the classroom to the business environment?

As is the case for most long-standing problems, there are no easy solutions. There is also unlikely to be a single solution. The following are some possible paths for various contributors to the current environment to muse upon.

Academia—Incorporate into math courses more team-oriented assignments and foster more of an environment where success for an individual is at least partly a function of the success as a group. Some colleges already incorporate this team-oriented mindset in certain areas, encouraging classmates to work together on some projects and to leverage each other’s strengths so that all can excel.¹ Yes, this may be harder to grade, and yes, it risks giving too much credit to a freeloader, but the reward is hopefully worth the risk.

Supervisors and clients of actuaries—Refuse to accept an actuarial communication that stops at “the answer.” Insist that the findings, risks, and possible alternatives be included in any such communication. This mindset can be found in the documentation requirements in Unpaid Claim Estimates ASOP.²

Employers of actuaries—Include teambuilding training for your staff.

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¹ I heard of such an approach a few years ago at Ringling College of Art & Design. They stressed to their students that they were all in it together, that the reputation of one depended at least partly on the reputation of the other—that alumni had a strong reputation if the current students had a strong reputation and vice versa.

² Actuarial Standard of Practice No. 43, as issued by the U.S. Actuarial Standards Board.

A Question of Balance

Dear Editor:

I feel that ["A Question of Balance"] ("From the President," *AR*, May 2011) is dead-on and it is especially telling that the comments regarding communication and business sense have been repeated for "decades." As an actuary practicing outside of the United States, and with exposure to actuarial professionals in many different markets, I can categorically state that this is not a problem unique to the CAS. I would like to offer some comments with regards to the three areas raised in the article.

First, technical skills. I personally am concerned if our *Syllabus*, in an attempt to be comprehensive, has strayed from the mission of covering what every actuary needs to know to trying to cover what any actuary might possibly need to know. With regards to GLMs, for example, there is an article that discusses its uses and applications. This should be enough for every actuary to understand that this tool exists and how it can be applied. But not every actuary needs to know how to apply this tool. Those who do need to know can find additional sources of information (including other actuaries) to increase their depth of knowledge. I would posit that other topics (Copulas, Table M, etc.) may fall into this category.

Second, communication skills. While the suggestion of including clarity of presentation as part of the grading process of the exams is very interesting, it can only be effective if we communicate to the candidate how much of his failure to pass was due to lack of technical knowledge and how much was due to failure to communicate. (Perhaps we could bring back the 5* for situations such as these?) This would also require the exam committees to determine how much weight to give each aspect in defining the grading process. I agree that this skill is very important, but we need to think carefully about how to incorporate it into the educational process.

Third, business sense. I often wonder how much more effective our exam track would be if we had an exam earlier in the process that placed a business context around the actuarial functions (pricing, reserving, risk modeling, etc.). Would it be easier to understand reserving if our students had a clearer idea of the financial flows of an insurance company? Especially in larger companies, where actuarial students are a small part of a much larger process, it may be very difficult for them to understand how their work (and the material on the exams) relates to the bigger insurance company picture.

Again, I applaud the author of this article in bringing to our attention that we need to be constantly in touch with what skills are necessary in today's world, but also that our shortcomings have not changed over time.

—David Sommer, FCAS
Towers Watson, São Paulo, Brazil

Dear Editor:

CAS President Ralph Blanchard ("A Question of Balance" *AR*, May 2011) continues, albeit in a much softer tone, in the tradition established by former Presidents Kollar ("New Approaches in Admissions Vital to Reaching the Centennial Goal" *AR*, November 2009) and Hayne ("Opportunity and the Risk of Circling the Wagons," *AR*, February 2010) of challenging the CAS exam system. Themes emphasized in these recent columns have included: modern technical skills cannot be tested by timed exams, we are more than good enough at hard technical skills anyway and need to shift admissions requirements more toward our soft business and communication skills, exams should be replaced with college classes or online courses or seminars, etc. CAS members should ask why are points like these any more true in 2011 than in 1914. In fact they were more valid in 1914. In 1914 with a tiny number of actuaries it was even more important that every member of the CAS be able to communicate clearly to non-actuary business people. In 1914 actuaries faced incredible challenges such as compiling statistics by worker classification (even to form a system of worker classifications was a new undertaking) and organizing teams of clerical people to run mechanical calculators to produce classification rates. How could the extensive management and creative thinking skills required for such elaborate projects ever possibly be tested using only timed paper and pencil exams?

Although the Internet and digital computers did not exist in 1914, facilities for college classes, seminars, and mail-order correspondence courses were all abundantly available back then. Why did the founders of the CAS reject these alternative methods of education? Why did they choose to focus the syllabus on an incredibly demanding gauntlet of rigorous exams of hard technical knowledge and skills rather than writing composition and the like? How would the reputation of the FCAS credential have evolved during the 20th century if the syllabus had been more balanced toward soft skills and validated primarily by passing college classes, attending seminars, and completing correspondence courses? Had that other path been chosen by CAS leaders in 1914 the FCAS in 2011 would be as prestigious and valuable as a bachelor's degree in marketing and management.

What will an FCAS be worth around 2036 if the CAS follows the path that is so popular among much of the current leadership? In that case, the 2036 FCAS will be equivalent to a bachelor's degree in marketing and management.

—Jon Evans, FCAS

I Won The Lottery-Part 2 Redux

Dear Editor:

"Taxes are what we pay for civilized society." —Oliver Wendell Holmes

It is unfortunate that Grover Edie elected to end his "In My Opinion" column ("I Won the Lottery-Part 2," *AR*, May 2011)

with a diatribe against taxes that included a false equivalency between basic human services and piano concertos, an incorrect assertion that the purpose of taxation is to create equivalency in life outcomes and an insulting statement implying that a divine being has decided to reward him, which implies that that divine being has not rewarded others.

As actuaries, we bill ourselves as preeminent risk managers. However, Mr. Edie's column did not recognize the most basic risk management system: government.

In an absolute sense, Mr. Edie is correct that "we" have won the lottery. However, there is much disparity in those wins in a relative sense. Some, like Bill Gates' children or the future Cy Young Award winner, have hit all the numbers on the Power Ball, while others, such as the child born into a single parent home in the projects merely won a \$1 scratch-off ticket. The purpose of taxes is to spread the risk of that genetic lottery to ensure that all citizens have basic human services so that they can live in dignity and have the opportunity to succeed. Taxes are essentially a premium paid for the risks inherent in the genetic lottery.

Mr. Edie also failed to recognize the basic principles of utility theory. That is, some services have greater utility to those with more wealth. The wealthier should pay more for national defense simply because they have more to protect. They should pay more for infrastructure since their invested assets will see greater benefit from that infrastructure.

Yes, taxes redistribute wealth just as insurance does from those who are claim-free to those who suffer catastrophic loss. The purpose of that redistribution is the same—to spread risk. Yet I don't see any actuaries arguing that insurance should be abolished.

—Rajesh Sabasrabuddhe, FCAS, MAAA

Dear Editor:

I recently read the editorial "I Won the Lottery—Part 2" by Grover Edie and I must say the piece really disturbed me. The crux of the article was an interesting thought experiment, comparing the dedication needed to be a top violin player, versus the dedication needed to be an actuary. However, out of nowhere in the third to last paragraph, the author decides to make a convoluted political argument about people sharing their wealth. Not only does this thought seem disjointed and out of place, but the ideas behind the argument are nonfactual and misleading. First, the author seems to forget that the majority of people who "won the lottery" are not actuaries or concert violinists. There are currently less than 6,000 members of the CAS, a drop in the bucket compared to the number of well-off people in this country. So while it's true that every CAS member worked very hard for his or her designation, it's very dangerous and misleading to then say that this must mean that every financially successful person must also be committed

25 Years Ago in the *Actuarial Review*

Admirable Exam Story

By Walter Wright

In a letter to the editor of the August 1986 Actuarial Review, members Walt Fitzgibbon and Glenn Fresch related a remarkable exam story.

"One of the new Fellows admitted in May deserves more attention than he got when he was introduced.

Bob Miller, now FCAS, also FSA (1948), FCIA, and MAAA, *retired last year* as the chief actuary of the Aetna after 39 years of service...

Bob managed to pass our exams while holding down a very demanding job, and at an age when most of us have put our studying years far behind us. We congratulate him. He's an actuary's actuary and a fine person.

This writer had the privilege of being acquainted with Bob (now deceased) and recalls talking to him shortly after he announced his retirement from Aetna. At that point he had been struggling to pass the "advanced ratemaking" exam, having failed it once or twice. But he said he was bound and determined to pass it, even after he retired! I was impressed then, and am even more so now that I am of a similar age.

AR

and hard working. Second, Grover Edie gives us no evidence at all that the majority of people who get ahead financially work considerably harder than those who do not. It's bad enough that the author throws us a political argument out of left field, but he makes matters worse by not even bothering to give any factual basis to justify his beliefs. Actuaries pride themselves on evidence and empirical results, and yet here any form of proof has mysteriously vanished. Finally, and most importantly, there was no need to make this argument about taxes in the first place. The subject of taxation and sharing of wealth has nothing to do with an article whose main focus is about luck and persistence. It's one thing if the whole editorial was about employment and tax policy. However, it seems as if the author purposely destroyed the flow of his editorial in order to make a political statement. I have no idea what positive purpose this served, and the potential

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From the Readers, From page 5

downsides are many. This isn't the first time I've written a letter to the editor about a poorly written *Actuarial Review* article that was in reality a thinly veiled political editorial. I have no problem with people who have different political views than me. However, I feel the *Actuarial Review* is not the place where such a discussion should take place. As actuaries, we should pride ourselves on our objectivity, and our professional publications should stick to industry-related stories and ideas. It's very difficult to appear unbiased when our publications encourage political slants of any kind.

—Josh Feldman, ACAS

Dear Editor:

I loved reading your article. It was easy to read and understand and had a great message. Thanks!

—Scott Kaminski, FCAS

Dear Editor:

[Regarding Grover Edie's recent columns] the second part makes more sense than the first one. I agree with the idea of perfect practice in order to achieve a professional level. I like [Edie's] passion for the actuarial field. Some people are arrogant because they are making money in their careers, and internally they found a correlation between balance in the checking account and IQ. There are thousands of professionals who are not lucky enough to have chosen a career with a good job market. Mathematicians, for example, have a life pretty tight in most countries in the world, and it takes four years of college to get a degree, an additional two years to get a MS, and finally five more years to get the Ph.D. But even in the U.S. a Ph.D. doesn't mean getting a good job (or even finding one).

It happens the same with MDs in Ecuador; it takes over 10 years to get the title. But over there the market has an excess of MDs, many of them finally landed jobs as cab drivers or entrepreneurs.

I think the concept of winning the lottery, as you referred in your articles, it is more related with your place of birth, your luck of choosing a career with a good job market, and your persistence in achieving your goal. Many other professionals in the world, with the same effort, have nothing. They are not

lucky enough.

—Mauricio Vergara

AR Editor in Chief Grover Edie responds:

The point of my prior opinion column is that it takes roughly 10,000 hours of deliberate effort to become proficient in a field.

The effort can be in the form of practice for a concert pianist or a violin virtuoso, or other forms of deliberate effort for other professional experts as cited in either of the books I referenced. The 10,000 hour requirement seems to be in line with the travel time it takes to become an FCAS.

Brainstorms: Ignoring Correlations Can be Deceptive

Dear Editor:

Glenn Myers' "Retrospective Tests of Stochastic Loss Reserves Models" ("Brainstorms," *AR*, May 2011) falls into the trap of ignoring correlations between future paid or case-incurred losses between Schedule P cells. A number of factors can cause such correlation:

- One calendar year affect will affect up to ten cells. That's 18% of the cells being tested. This could be just one judicial decision or a change in claims handling personnel. Case-incurred losses can be heavily influenced by how positive a company's results were in a given calendar year.
- A large payout for a particular accident year in one period may mean lower payouts thereafter—the model may have predicted the ultimate payments well—but all these cells will appear as outliers.

This would make the test he suggests less valuable than he envisions. A large number of outliers wouldn't mean the original model was bad, and a small number of outliers wouldn't mean the original model was good.


However, I would congratulate Mr. Myers on pushing the need to retrospectively test complicated models and their assumptions. In my opinion, retrospectively testing our methodologies and assumptions is something our profession desperately needs to improve on.

—Michael Solomon, FCAS 

From the President, From page 3

Actuaries themselves—Be aware of the limitations of your analysis and models. Acknowledge and communicate the uncertainty associated with the work product. Treat this uncertainty as a source of opportunity, not as a weakness to be hidden or ignored. (Young actuaries may also want to consider leveraging volunteer or social groups outside the workplace as a

low-risk opportunity to practice team skills.)

Please treat these as initial brainstorms, not definitive solutions. Also, note that I've omitted possible contributions from CAS continuing education offerings. Suggestions are welcome. 

Ballots Count: Vote in the CAS Election

In the summer of 1948, the U.S. presidential election was over, all but for the formality of voting in the fall. Harry S. Truman, the Democratic president who had taken over the reins of government when Franklin Delano Roosevelt (FDR) died in 1945, was far behind his opponent in the polls.

At the Democratic Party's national convention, 35 Southern delegates had walked out in protest of the party's position on civil rights. They formed a separate party, the Dixiecrats, and selected Strom Thurmond, the powerful governor of South Carolina, as their candidate, who would pull votes and support from the Democrats.

Henry Wallace, a seasoned politician who had served under FDR as secretary of agriculture from 1933 to 1940 and vice president from 1941 to 1945, left the Democratic Party to run on the Progressive ticket. This would be another erosion of Democratic support.

By the summer of 1948, the Democratic Party seemed poised to lose the election, almost regardless of whomever the Republicans ran. But the Republican candidate was a candidate to be reckoned with. Thomas E. Dewey, the Republican nominee, was the popular governor of New York. He would enjoy a healthy head start in the Electoral College with the votes of his own state. His running

mate, Earl Warren, was governor of California and would bring in another large voting bloc from that state. The pair seemed invincible, and the polls and the press agreed. Their campaign was well funded and destined for success.

But if you look in the history books, you find that Harry Truman, not Thomas Dewey, was elected in 1948. What happened?

In five states, the margin of victory for the party that carried the state was less than one percent of the voters. The Republicans won New York by just under one percent of the votes cast. California was lost to the Democrats by less than half a percent of the voters casting ballots.

It didn't matter what the polls or the press thought was going to happen. It mattered who showed up to vote on Election Day.

So what is the point?

It is not what the polls say that is important. It isn't even what the real population wants. What matters is who shows up and votes in the election. The CAS is no different. It is not what the members as a whole want that will decide whether or not the upcoming changes in the CAS Constitution and Bylaws are approved, it is simply who returns their ballots.

So vote! 

Actuarial Foundation Update



THE ACTUARIAL
FOUNDATION

It's Back to School Time—Give a Classroom the Gift of Financial Literacy

The new school year is almost here. As our nation's teens wrap up the fun of their summer vacation, teachers are finalizing their lesson plans for the coming semester. Hundreds of these teachers are relying on actuaries to help them complete their plans by sponsoring them with a set of the Foundation's "Building Your Future" financial literacy curriculum.

The lessons in "Building Your Future" will help these teachers' students easily grasp the essentials of personal finance, give them multiple opportunities to practice core skills, and showcase the real-world impact of the financial decisions they make. "We are very grateful for your gift," said a teacher from Somers High School in Connecticut. "As you know, having our students grasp the essentials of personal finance is crucial in today's world and your support of us is very meaningful."

Join other actuaries who are helping teachers prepare their students for life on their own. View the Foundation's waiting list of teachers (<http://www.actuarialfoundation.org/donate/quench.shtml>) and sponsor one with a classroom set of "Building Your Future" materials!

Are You a Regional Affiliate Member Looking for a Speaker for Your Next Event? If you struggle with finding topics, speakers, or new ideas for your events, consider presenting news of The Actuarial Foundation's activities and initiatives to your group. Contact the Foundation at info@actfnd.org to learn about presentation opportunities for your upcoming meetings.

Learn More about The Actuarial Foundation by visiting the Foundation's Web Site and reading its donor newsletters. You can also read about the Foundation's work and its far-reaching impact in its 2010 Annual Report. 

In the Next Issue of *Variance*


In the coming issue of *Variance*, Thomas Daley's "Catastrophes and Workers Compensation Ratemaking" explains a new workers compensation ratemaking methodology that improves the treatment of large individual claims and catastrophic multiclaim events.

David Clark's "Credibility for a Tower of Excess Layers" shows how the traditional method for applying credibility, as a weighted average of two estimate of expected loss, one from experience rating and another from exposure rating, can be improved by incorporating loss estimates from lower layers. This produces a multifactor, credibility-weighted estimate of expected loss.

"Copula Regression" by Rahul Parsa and Stuart Klugman presents copula regression as an alternative to ordinary least squares and the generalized linear model, and demonstrates a major advantage of using the normal copula.

"Pricing in a Competitive Insurance Market Driven by Fractional Noise" by Alexandros Zimbidis looks at empirical

evidence of long-range dependency in the Greek motor insurance market and formulates a stochastic pricing model in a continuous framework. The optimal premium strategy is found to be considerably different under the absence or existence of the long-range dependency.

"Correlated Random Effects for Hurdle Models Applied to Claim Counts" by Jean-Philippe Boucher, Michel Denuit, and Guillén Montserrat presents new models for panel data that consist of a generalization of the hurdle model. Correlated random effects are assumed for the two processes involved to allow for dependence between all the contracts held by the same insured. 

 *Advancing the Science of Risk*

CAS Promotes Industry Meeting Hashtags!

Created as a way to categorize messages, the # symbol, called a hashtag, is used to mark keywords or topics in Twitter messages or tweets. The CAS has created several hashtags to use at different meetings throughout the year. **#CASspring** and **#CAREspring** were used to promote the 2011 Spring Meeting and Seminar on Reinsurance. Look on the CAS Web Site or Twitter flyers at the next CAS event to find the event hashtag.

Here are some of the tweets from 2011 CAS Spring Meeting:

rmosley_par: See the presentation I gave at **#CASspring** meeting on using predictive #analytics to detect fraud - <http://t.co/VIP09Cn>

aviwiki: New associates and fellows making their way into **#CASspring**. I remember that feeling! <http://twitpic.com/4yexxh>

reinsurancegirl: that's a lot of actuaries in one room RT @aviwiki: Part of the room at the #socialmedia session at **#CASspring** <http://yfrog.com/h7h5lyffj>

jimlynch9999: Florida Gov. Scott Signs Property Insurance Cost Control Bill <http://ow.ly/4XdAc>—Focus of Monday general session at **#CASspring**

manckath: Are we leaders or technicians? What comes out of the syllabus to make room for communication skills? Brian Sullivan at **#CASspring**

Follow the CAS on Twitter @CASact. Not using Twitter yet? Text "CASact" to 40404 and follow the prompts to sign up. 



Learning: The Journey That Lasts a Lifetime!

For me, summer has come to mean transition. Some years, summer vacation has been a time of rest and relaxation, a time to recharge; other years, it has brought great excitement, as my family and I explored new places and tried new things. Our professional lives have similar transitions, and the challenge for each of us is to recognize and embrace the opportunities that transitions present to reorient and recharge, or to explore and grow.

As a CAS leader, I have had the pleasure and privilege of welcoming new Associates and Fellows to our Society. Certainly, admission to the CAS and achievement of the Fellowship designation represent major professional accomplishments. As an ACAS, you are formally recognized as an actuary, and, subject to the Code of Professional Conduct, are able to provide actuarial services. As an FCAS, you have gone the course, successfully mastering the subjects covered in the CAS basic education syllabus. These milestones are also a great time to reflect, reorient, and, hopefully, to reaffirm. They are the first leg of the lifetime journey of learning that defines us as professionals. While our new Fellows clearly relish the idea of “no more pencils, no more books,” I hope they are also asking themselves, “What’s next?” For the mid-career actuary who feels stuck in a rut, the question might well be, “What do I need to do to once again find passion in my work?” And, for those of us approaching retirement (or newly there), isn’t it exciting to explore what might hold our interests during the next phase of our lives?


Intellectual curiosity is one of the defining attributes of casualty actuaries. Over the years, our thirst for understanding what we *don't know* has brought valuable new discernments that have helped to solve the difficult questions that our industry was facing. All of the major advances in our profession have come from reaching out—and reaching within—to find new insights, suggest alternative approaches, and define new products.

Each of our paths will be different, and that’s good for our profession. Just like summer vacations, some will choose to go back to the same place each year while others will want to mix it up from one year to the next. My own path has been quite varied—from traditional actuarial roles within an insurance company, to underwriting management, then marketing management as a regional vice president. From there I went into direct client delivery within a professional services firm to practice management. And now, in retirement, the CAS, philanthropy, and education are my passions. I learned from

each of these experiences that true learning takes place at times and in ways that are least expected and that stepping outside of my comfort zone can reap tremendous rewards. Only when I began to make presentations to non-actuaries did I understand the value of walking in another’s shoes and the exhilaration that comes from connecting with an audience. Only when I was asked to manage an underwriting function did I really understand the value and insights that underwriting professionals bring to the table. Only when I was responsible for managing a practice did I come to fully understand the business of consulting.

For most casualty actuaries, the first leg in the lifelong journey of learning is technical in nature. The CAS basic education syllabus gives our members a solid foundation in technical topics that casualty actuaries are likely to face in the course of their work and current techniques to address these topics. The Code of Professional Conduct, reinforced now with the CAS Continuing Education Policy, directs actuaries to stay current on these technical topics as practice evolves. The ever-changing landscape of casualty actuarial practice provides a wide array of subjects for technical growth and exploration. How might we calculate a risk margin in reserves if one is ultimately required for financial reporting? How might we use GLM techniques in identifying and marketing to new customers? What lessons might there be for casualty actuaries from the global financial crisis in the design and use of models? What might we learn about professionalism from the medical or accounting fields?

But the world is so much larger than the technical topics that consume our days. Senior management consistently counsels that actuaries’ communication and team-building skills are limiting their advancement. Influence and negotiation skills have proven essential to the actuary’s overall effectiveness. So, if you want to get ahead, where might you invest for the future? There are many opportunities, both within and outside the CAS, to hone these business skills.

The roads are many and varied in the lifelong journey of learning. Some will offer reaffirmation; others will offer challenge. All can be exhilarating. Whether you choose to bring innovation to the traditional actuarial roles of pricing, reserving, and capital management or decide to explore new areas of practice in customer management, utility theory, or enterprise risk management, I urge you to embrace the journey. Each opportunity offers a wealth of learning and the potential for recharging. Let’s never lose the excitement that comes from learning new things, exploring new areas, and embracing higher expectations. 

Advice from the CAS Career Center

Energize Your Job Search with a Marketing Plan

A sound marketing plan is essential to a successful job search. Separate from your resume, a well-defined marketing plan will help you focus your job search even more. The CAS Career Center offers you these marketing plan tips:

1. **Establish a clear objective** to define the work you desire including responsibilities and job functions.
2. **Create a positioning statement** with a list of your key competencies and top accomplishments.
3. **Know your target market** of organizations, geographic locations, industry, and size.
4. **Refine your target list** of employers that interest you.
5. **Take advantage of Preferred Resume Post for only \$10!** This feature moves your resume to the top of the full resume search results, above those who signed up for this service.

Once you have your marketing plan in place, visit the CAS Career Center at <http://careers.casact.org> to find all of the great job opportunities that match your strengths and interests! **AR**

Visit Our
Career
Center

The Source for
Property & Casualty
Actuarial
Jobs and Resumes

Find Your
Dream Job
or
Recruit the
Perfect Candidate

Visit <http://careers.casact.org> today!

CAS Webinars Offer Cost-Effective CE Credit

Looking for opportunities to gain continuing education credit? Attending CAS Webinars is a great way to get “organized activity” continuing education credit without leaving your office.

Since their start in 2007, CAS Webinars have been well-attended and have received positive reviews. A sample of past Webinar topics include “CAT Bonds and Risk Loads,” “Professionalism,” “Copulas,” and “Claim Fraud Detection.” CAS Webinars will cover a wide variety of subjects in the remainder of 2011 and into 2012.

The CAS Webinar Committee works with presenters to develop educational opportunities that are timely and useful, all at a reasonable cost. If you have ideas for future Webinars, please send an e-mail to meetings@casact.org. We’d love to hear from you!

Look to the CAS Web Site and the weekly E-Bulletin for information on registration and Webinar content. Be sure to consider the CAS Webinars when planning your continuing education for the remainder of 2011. **AR**

Encoding Bits for Fun and Profit

Jon Evans created this puzzle: a giant computer company has a contract to encode large amounts of binary information on storage media. Statistically, each bit is equally likely to be 0 or 1 independent of the values of any other bits. However, the encoding machine produces a bad imprint for every bit in a sequence of 1s as long as, or longer than, a fixed length L . The client will pay \$1 for every terabit (trillion bits, or 10^{12} bits) imprinted, but the consequence of a single incorrect bit is so catastrophic that the client charges \$1 billion for each such bit.

For example, the company would be paid \$1 billion to encode a billion terabits. However, if $L = 20$ and at any point in the information there is an unlucky sequence of 25 consecutive 1s, all 25 of these 1s will be incorrectly imprinted, since $25 \geq L$, and consequently the computer company will have to pay the client \$25 billion dollars!

The computer company can maintain its machine to achieve any value of L , as high as desired, but the cost rises exponentially with the value of L . Specifically, the maintenance cost per bit is $\$(2^{L-117})$. For example to set $L = 30$ would only cost $\$(2^{-87})$ per bit or only about \$0.000006 for a billion terabits, but to set $L = 1000$ would cost about $\$6 \times 10^{286}$ for a billion terabits.

Is it possible for the computer company to produce a positive expected profit?

Know the
answer? Send
your solution to
ar@casact.org.

The First Odd Number


The puzzlement was easy to state but proved quite a challenge! Here's the puzzlement: the integers from one to ten billion are written out in formal English and listed in alphabetical order; for example, "forty-six," "one thousand twenty-four," and "two hundred twenty-nine." Punctuation and spaces are ignored in the alphabetization. What is the first odd number in the list?

John Jansen was the first to supply the correct answer of 8,018,018,885, i.e., eight billion eighteen million eighteen thousand eight hundred eighty-five. One near miss is 8,000,001,885 if it is written as eight billion eighteen hundred eighty-five. The problem with this is that the formal English way of writing 8,000,001,885 is eight billion one thousand eight hundred eighty-five.

David Uhland made some comments on related problems with upper bounds lower than ten billion stating, "Sticking with upper bounds of the form 10^n , if the upper bound is limited to one billion instead of ten billion, the answer drops down to 1885, 'eighteen hundred eighty-five.' Or, if you don't like 'eighteen hundred,' even in this case, then the answer is 18,885, 'eighteen thousand eight hundred eighty-five.'

"If one drops the upper bound to 1000, then the answer is 885, 'eight hundred eighty-five.' If one drops the upper bound to 100, then the answer is 'eighty-five.' And if the upper bound is 10, then the answer is 5."

Gary Venter adds, "For primes, maybe it is 8,018,018,851. Of course you can do better in French, where $2 = du$, or in Indonesian, where $2 = dua$. The lowest prime, alphabetically, in Roman numerals seems to be CI."

Others submitting solutions were Neal Anderson, Jack Brahmer, Michael Captain, Todd Dashoff, Wil Edie, Jon Evans, John Herder, Dan Hogan, Rob Kahn, Jerry Miccolis, F. James Mohl, Christopher Mosbo, Chuck Norton, Ken Quintilian, Eric Savage, Calvin Schlak, Steffen Siegel, David Spiegler, Jessica Stanton, Jeff Subeck, and Rick Sutherland. 

CAS Spring Meeting Keynote Speaker Encourages Actuaries To Be Leaders

By Dave Core, CAS Director of Professional Education and Research

“**H**ow do you see yourselves? As either leaders or as technicians?” Auto and P&C insurance industry expert and journalist Brian Sullivan asked this to more than 500 on-site attendees and more than 200 live Webcast viewers during the opening session of the CAS Spring Meeting in Palm Beach, Florida, May 16. “Actuaries as leaders would be better for the industry and provide a more prominent role for them in their companies,” said Sullivan, the meeting’s keynote speaker.

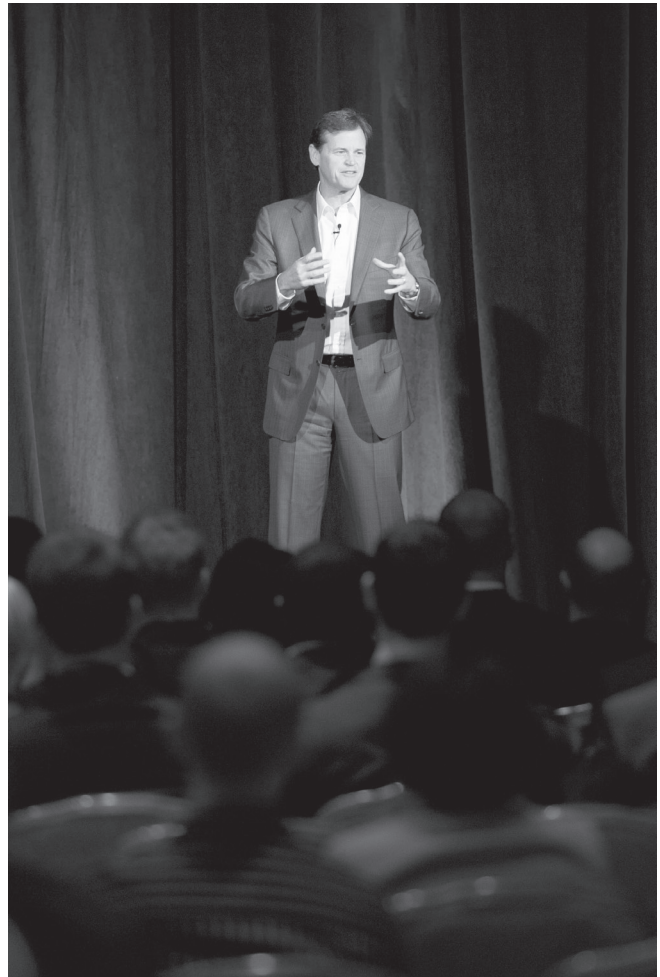
With over 25 years of insurance industry experience and as editor of the *Auto Insurance Report* and the *Property Insurance Report*, Brian Sullivan brings a different perspective of the roles, functions, and perceptions of actuaries. He said actuaries are uniquely positioned to be leaders in their companies because “no one has a better understanding of the most essential part of the insurance company”—assessment of risk—and because the process of learning that actuaries have acquired has taught them “how to learn so that [they] will have a nimble and flexible mind[s] for the rest of [their careers].”

Sullivan said that most actuaries are not promoted beyond chief actuary into leadership roles in their companies because they do not “look outside of their own narrow niche and are not good communicators.” The analytical and mathematical skills of budding actuaries help them to study for and pass the exams that build on these skills. Yet, every day “it becomes harder to be an actuary because of the nature of analysis, level of math, and the multiplication of what you need to know.”

He added that those who become CEOs of insurance companies are often the chief financial officers because they deal with all facets of the business—underwriting, claims, marketing, sales, and risk assessment—and are able to comfortably talk to outside directors.

Sullivan suggested that we incorporate more communication and business skills into the basic education curricula of actuarial exams. The challenge would be to determine what current components of the exams would be removed to make room for these additions.

Sullivan commented that insurance is “the most complex business because you cannot tell the future and yet you have to



Brian Sullivan

assign a price to it.” Actuaries are well suited for prominent roles in their companies because of their unique abilities to evaluate future risk that could better position their companies. But they need to focus on communication, business, and other skills to prepare them for significant leadership roles in their companies.

If you missed the session or the Webcast, it has been recorded and is available for viewing at no charge by going to the CAS Web Site under Professional Education, Meeting and Seminar Archives. [AR](#)

Loves to Perform

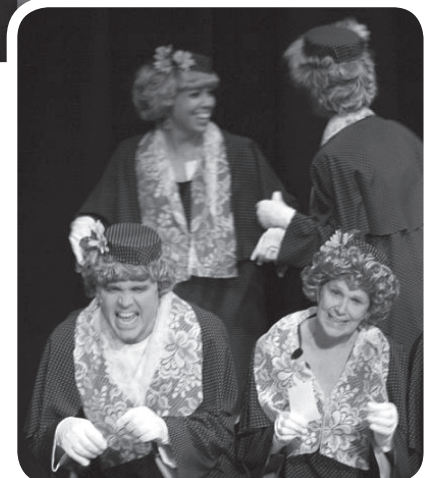
Barry Blodgett is a self-confessed ham. He loves to perform in public and he came from a very musical family. Being on stage was just another opportunity to sing. When Barry was young, he saw his older cousin perform in *Fiddler on the Roof* and could hardly wait to get involved. Barry became active in musical theater in high school. He soon discovered that being in swing choir and theater gave a relatively shy kid a chance to dance with and to be in close proximity to girls.

After high school, the only opportunity Barry had to sing in public was at church. However, one summer his daughter signed up for a musical theater day camp, which put his family on a mailing list for the venue. Through the theater's communications, Barry learned that they would be performing *Fiddler on the Roof*, the show he had loved since he was a boy. As a man of faith and father of all daughters, he could relate to the main character, Tevye. With the actuarial exams behind him and his daughters older, he had more time to be out of the house and decided to join the cast. Participating in the show rekindled an interest that had remained dormant for many years.

His favorite role, however, was that of Reuben, the oldest of twelve sons, in *Joseph and the Amazing Technicolor Dreamcoat*. As the oldest brother (by far) in the cast, Barry found many of the dance moves quite challenging. One particular example was a boy-band-type dance move that he could not easily master. However, his choreographer and fellow cast members were all excited for him, and perhaps a little surprised, when he finally got the move right shortly before the show opened. Although it takes a lot of work, Barry greatly enjoys the community and camaraderie that develops in a cast. He was recently cast in *Bye Bye Birdie* as Harry MacAfee, who was portrayed by Paul Lynde in the movie of the same name. Barry expects to have a lot of fun in the role.

Although Barry's daughters do about three shows a year, his schedule limits him to about one show each year. Each show's practice routine is different, averaging about three to four nights per week, three hours each, for two months. Then comes "tech" (dress rehearsal) week—the week before the show opens—that may require up to five hours of rehearsal each day. The week can be chaotic, with the cast bickering, the directors and choreographers barking at the cast, and the band fighting their director. Lighting and sound technicians get involved in the fray

Nonactuarial Pursuits, page 14



The many faces of Barry Blodgett, from top: Blodgett as Kevin the Costume Designer in The Producers; Blodgett, left, as Harry the Horse in Guys and Dolls; and front row, left, Blodgett as a little old lady in The Producers.

NAP Needs Your Input!

Do you have, or know a CAS member who has, an interesting nonactuarial pursuit? If so, we'd like to hear from you. Send an e-mail to ar@casact.org and let us know what you do in your off-hours.

too. As opening night approaches, Barry sometimes forgets why he submits to all this. However, when opening night hits, all of the kinks have been worked out, and a crowd packs the house, he quickly remembers why he enjoys it so much. The time spent actually performing the show goes by too quickly.

Much that happens during a community theater production keeps the cast laughing. Many humorous events may only be evident to the cast or a few in the audience. There are the times that an actor is on stage only to realize that his quick costume change isn't complete. He is still wearing the hat from the other costume, his fly is open, he didn't put shoes back on, or in a rush he forgot to bring on his prop. In Barry's experience, covering for cast members who have missed their entrances is always exciting. One time the butler failed to announce the arrival of another character, so the cast member had to knock on the floor as if it were a door and enter alone. One dancer had costume issues, so her partner simply went on and tangoed by himself. It was a funny sight, since he kept his

As opening night approaches, Barry sometimes forgets why he submits to all this. However, when opening night hits, all of the kinks have been worked out, and a crowd packs the house, he quickly remembers why he enjoys it so much.

arms up as if she were there. Another actress had to change her costume near the edge of the stage. When the lights came up, she was supposed to enter, so they turned on her mic. Instead of seeing her enter, the audience heard her curse as she struggled to finish dressing.

Prior to entering the stage, Barry often reviews the scene in his mind to make sure he has his lines and movements straight. After entering, he gets caught up in the scene and can almost forget about the audience. Nonetheless, he constantly tweaks the delivery of lines with timing and inflection in order to get the best response. At the end of a show, hearing the response from the audience is a greatly rewarding feeling, especially after weeks of having only his fellow castmates and directors view and critique his performance. It is always a boost when he knows that he has friends and family members in the house too. It's a great feeling for a ham to get out on stage and have people respond to his performance.

Barry Blodgett is a vice president at Swiss Re in Schaumburg, Illinois. 

2011 Grant Recipients Announced

In an effort to support the advancement of knowledge in actuarial science, the Individual Grants Competition is held annually as a joint effort of The Actuarial Foundation, the Society of Actuaries' Committee on Knowledge Extension Research, and the Casualty Actuarial Society. The 2011 competition resulted in several interesting and exciting research proposals.

After reviewing all of the proposals submitted by the researchers for the 2011 competition, the CAS Research Grants Task Force, chaired by Linda Howell, selected projects that were potentially useful to CAS members and therefore deemed worthy of funding. Nearly \$30,000 in funding was awarded.


Two projects were selected to receive CAS funding this year. They are:

- "Nonparametric Regression in the Presence of Missing Data: Theory, Methods & Application to the Analysis of Credit

Scoring as a Fair Rating Variable" by Sam Efromovich, Ph.D.

- "A Flexible Predictive Model for Pure Premium Estimation" by John B. Henry III, Ph.D., and Edward J. Yorty, FCAS, MAAA.

Completed papers will eventually be submitted to either *Variance* or the *North American Actuarial Journal* upon completion and will be available on the CAS Web Site. In fact, two former grant winners were published in *Variance* in 2010: "Bounds for Probabilities of Extreme Events Defined by Two Random Variables" by Samuel H. Cox Jr., Yijia Lin, Ruilin Tian, and Luis F. Zuluaga, and "Optimal Layers for Catastrophe Reinsurance" by Luyang Fu and C.K. "Stan" Khury.

For anyone interested in participating in the 2012 Individual Grants Competition, letters of intent are due in October. More information can be found on The Actuarial Foundation's Web Site, www.actuarialfoundation.org. 

Constitution and Bylaws Changes to be Voted on During 2011 Elections

The CAS Board of Directors is proposing changes to the CAS Constitution and Bylaws for the Fellows' consideration on the 2011 election ballot. In order to be adopted, the proposed changes require an affirmative vote of 10% of the Fellows or two-thirds of the Fellows voting, whichever is greater. A total of four ballot questions will be presented to the Fellows.

The ballot questions relate to the ACAS voting eligibility, ACAS Board service eligibility, and the actuarial discipline process. In addition, during the review of the Constitution and Bylaws, one instance of antiquated language was uncovered.

The proposed changes, each of which will be presented and voted on individually, are described briefly below. More details on the changes are provided in subsequent pages. The actual wording changes for the proposed amendments to the Constitution and Bylaws can be reviewed beginning on page 16.

Summary of Ballot Questions for Proposed Changes to the CAS Constitution and Bylaws

1. Do you approve the Constitution and Bylaws changes allowing Associates to vote (i.e., to become Voting Members of the CAS) five years after they are recognized as Associates, if they have not yet attained Fellowship?

Changes affecting (1) Constitution Article III, Sections 1a and 1b; (2) Constitution Article IV, Sections 2 and 4; (3) Constitution Article V, Sections 2 and 4; (4) Constitution Article VII; (5) Constitution Article VIII; (6) Constitution Article IX, Item (i); (7) Constitution Article XII; (8) Bylaws Article V; and (9) Bylaws Article IX.

This proposal was initiated by the Task Force on Associate Rights, which was formed in response to member concerns that were expressed in the 2008 Quinquennial Membership Survey. The Task Force was asked to evaluate how best to ensure fair representation within the CAS of Associate members, including such issues as voting rights, Board service, and dues. The Task Force recommendations were presented to the CAS Board of Directors in September 2010, at which time the Board agreed to propose changes to the CAS Constitution and Bylaws that

would give Associates the right to vote either upon attainment of Fellowship or five years after they are recognized as Associates, whichever occurs first.

Additional details can be found on pages 24-27.

2. On the condition that the first question passes, do you approve the Constitution and Bylaws changes making all Voting Members eligible to be elected members of the Board?

Changes affecting (1) Constitution Article V, Sections 1 and 2.

This proposal was also initiated by the Task Force on Associate Rights and presented to the CAS Board of Directors in September 2010. The Board agreed to propose changes to the CAS Constitution and Bylaws that would allow all Voting Members to be eligible to be elected members of the Board.

Additional details can be found on pages 24-27.

3. Do you approve the Constitution and Bylaws changes related to the discipline process?

Changes affecting (1) Constitution Article X, and (2) Bylaws Article VI, Sections 2, 3, and 5.

During the May 2011 Board meeting, the Board passed a motion to recommend that the Fellows vote to approve the amendments to the CAS Constitution and Bylaws that would allow the CAS, with appropriate Board approval, to participate in a joint disciplinary process that meets certain criteria.

Additional details on the changes to the discipline process can be found on pages 28-37.

4. Do you approve the elimination of antiquated language from the Constitution and Bylaws related to Affiliate members?

Changes affecting (1) Constitution Article III, Section 1c.

In reviewing the Constitution and Bylaws, one instance of antiquated language was uncovered. The Board agreed that the Constitution does not need to specify that Affiliates are entitled to attend meetings of the Casualty Actuarial Society and to participate in Society functions. The CAS does not restrict attendance at its meetings and seminars.

Proposed Changes to the CAS Constitution and Bylaws

[Proposed November 7, 2010, and May 15, 2011]

CAS CONSTITUTION

NOTE: Deletions are in strike-through; additions are underlined.

(As Amended August 30, 2010)

ARTICLE I. - *Name*

This organization shall be called the "Casualty Actuarial Society." (CAS)

ARTICLE II. - *Statement of Purpose*

The purposes of the Casualty Actuarial Society are to advance the body of knowledge of actuarial science applied to property, casualty, and similar risk exposures, to establish and maintain standards of qualification for membership, to promote and maintain high standards of conduct and competence for the members, and to increase the awareness of actuarial science.

ARTICLE III. - *Membership*

SECTION 1.—CLASSES OF MEMBERS

The membership of the Casualty Actuarial Society shall be composed of three classes:

a) Fellows

The Fellows of the Society shall be the present Fellows and those who may be duly admitted to Fellowship as hereinafter provided. Fellows shall be ~~eligible to vote, hold office, make nominations, and generally exercise the rights of full membership~~ Voting Members of the Society and shall also be eligible to hold office, make nominations, and generally exercise the rights of full membership. Fellows are authorized to append to their names the initials F.C.A.S.

b) Associates

The Associates shall be the present Associates and those who may be duly admitted to Associateship as hereinafter provided. ~~Associates shall be entitled to attend meetings of the Casualty Actuarial Society and to participate at Society functions. Five years after becoming an Associate (or upon becoming a Fellow, whichever occurs first), an Associate shall become a Voting Member of the Society. Members who have been Associates for five years as of any date on or after the date of adoption of this provision will then immediately become Voting Members.~~ Associates are authorized to append to their names the initials A.C.A.S.

c) Affiliates

The Affiliates shall be the present Affiliates and those who may be duly admitted as Affiliates. ~~Affiliates shall be entitled to attend meetings of the Casualty Actuarial Society and to participate at Society functions.~~ Affiliates are encouraged to refer to themselves as such, but are not authorized to append CAS initials to their name. In referring to themselves Affiliates may refer to themselves as "Affiliate of the Casualty Actuarial Society" or "Affiliate Member of the Casualty Actuarial Society." They may not refer to themselves as "Member of the Casualty Actuarial Society."

SECTION 2.—REQUIREMENTS FOR ADMISSION TO MEMBERSHIP

a) Associateship

Any applicant shall be enrolled as an Associate upon notification by the Casualty Actuarial Society provided that:

- (i) the applicant successfully completes the examinations prescribed by the Board of Directors for Associateship and complies with any further requirements the Board may prescribe; and
- (ii) the applicant is approved by a majority vote of the Board of Directors.

Associate
Voting
Eligibility

Remove
Antiquated
Language

b) Fellowship

An Associate shall be enrolled as a Fellow of the Society following notification of successful completion of the examinations prescribed by the Board of Directors for Fellowship, subject to any further requirements the Board may prescribe.

c) Affiliates

An actuary who is not otherwise a member shall be enrolled as an Affiliate upon action of the Board of Directors, subject to such requirements as the Board may prescribe.

d) Waiver of Examinations

The Board of Directors may waive, subject to such other requirements as it may prescribe, any examination of the Casualty Actuarial Society if the applicant has passed an examination required by another recognized actuarial organization that the Board of Directors deems equivalent to such examination of the Casualty Actuarial Society.

e) Mutual Recognition

The Board of Directors may negotiate and implement Mutual Recognition Agreements with other actuarial organizations that qualify actuaries through a process that includes rigorous testing of a comprehensive property and casualty specialization. Such Mutual Recognition Agreements will include requirements that applicants:

- (i) complete the property and casualty specialization requirements and all other requirements for full membership in their home organization,
- (ii) complete the CAS professionalism education requirements, and
- (iii) complete property and casualty experience requirements to be specified by the Board.

The Board may include additional requirements in the Mutual Recognition Agreements.

Any applicant who meets the Mutual Recognition requirements so agreed, and any other requirements prescribed by the Board, and who is approved by a majority vote of the Board of Directors shall be enrolled as a Fellow.

ARTICLE IV. - Officers

SECTION 1.—OFFICERS

The President, President-Elect and the Vice Presidents, all of whom shall be Fellows, shall be Officers of the Society. The Chief Staff Executive is also an Officer. An Officer shall be designated by the Board as Secretary/Treasurer of the Society.

SECTION 2.—ELECTION AND TERM OF OFFICE

At the close of the annual meeting, the President-Elect shall assume the office of President for a term of one year. Annually, a new President-Elect shall be elected by the [Fellows Voting Members](#) in a secret ballot for a term of one year. Before the close of the annual meeting, the Board of Directors shall, by majority vote of the Directors present and voting, elect the Vice Presidents for a term of one year.

The term of all Officers shall begin at the close of the annual meeting in the calendar year of their election and continue until their successors take office.

SECTION 3.—DUTIES

The duties of the Officers shall be such as are customarily incident to their respective offices and such other duties as specified in the Bylaws.

SECTION 4. REMOVAL FROM OFFICE

The process for the removal from office of the President-Elect or President can be initiated by either a petition of 5% of the [Fellows Voting Members](#), a two-thirds majority vote of the Officers of the CAS (with the person proposed to be removed not voting), or a majority vote of the Board of Directors (with the person proposed to be removed not voting). Reasons for the removal include: violation of the code of conduct; abuse of power; behavior materially incompatible with the proper function and purpose of the office.

Procedures relating to the removal process shall be adopted by the Board. Once the removal process has been initiated, a hearing and vote of the Board will be held within 45 days. A vote to recommend removal requires a two-thirds majority of the Board members voting (with the person proposed to be removed not voting). A Board recommendation for removal shall be subject to approval by a vote of the [Fellows Voting Members](#), to be held within 45 days of the Board vote. A two-thirds majority of the [Fellows Voting Members](#) voting is required for removal.

Associate
Voting
Eligibility

ARTICLE V. - Board of Directors

Associate Board Service Eligibility and Associate Voting Eligibility

SECTION 1.—COMPOSITION

The Board of Directors shall consist of the President, the President-Elect, the immediate past President, 12 other elected [Fellows Voting Members](#) and up to three additional appointed members.

SECTION 2.—ELECTION AND TERM OF OFFICE

Annually, in a secret ballot of the [Fellows Voting Members](#), four [Fellows Voting Members](#) shall be elected to the Board of Directors for a term of three years. A retiring elected Director shall not be eligible for reelection for at least one year after the expiration of the term for which the Director was elected. Appointed Directors will be elected by the Board of Directors and will serve a term of one year, renewable for up to three years.

SECTION 3.—DUTIES

The duties of the Board of Directors shall be to pass upon candidates for membership, to supervise the publication of papers presented at meetings of the Society, to supervise the examination of candidates and prescribe fees for such examinations, to call meetings, to ratify such committee and other special appointments as may be made by the President, to authorize promulgation of statements of principles, and, in general, to manage the affairs of the Society, and, for the latter purpose, shall determine all questions arising with respect to the interpretation or administration of this Constitution and the Society's Bylaws not inconsistent therewith.

The Board of Directors may, at its discretion, delegate authority to fulfill specific duties to the Executive Council, subject to policies adopted by the Board of Directors and ongoing monitoring and oversight by the Board.

SECTION 4. REMOVAL FROM OFFICE

The process for the removal from the Board of the immediate past President or any elected Director can be initiated by either a petition of 5% of the [Fellows Voting Members](#), a two-thirds majority vote of the Officers of the CAS (with the person proposed to be removed not voting), or a majority vote of the Board of Directors (with the person proposed to be removed not voting). Reasons for the removal include: violation of the code of conduct; abuse of power; behavior materially incompatible with the proper function and purpose of the office.

Procedures relating to the removal process shall be adopted by the Board. Once the removal process has been initiated, a hearing and vote of the Board will be held within 45 days. A vote to recommend removal requires a two-thirds majority of the Board members voting (with the person proposed to be removed not voting). A Board recommendation for removal shall be subject to approval by a vote of the [Fellows Voting Members](#), to be held within 45 days of the Board vote. A two-thirds majority of the [Fellows Voting Members](#) voting is required for removal.

ARTICLE VI. - Executive Council

Associate Voting Eligibility

SECTION 1.—COMPOSITION

The Executive Council shall consist of the President, the President-Elect, the Vice Presidents and the Chief Staff Executive. The number and duties of Vice Presidents shall be determined by the Board of Directors.

SECTION 2.—DUTIES

The Executive Council shall act on matters specifically delegated to it by the Board of Directors. It shall act as the principal forum in which the operational activities of the Society are coordinated and monitored, subject to policies adopted by the Board of Directors and monitoring and oversight by the Board of Directors.

ARTICLE VII.- Meetings

There shall be an annual meeting of the Society on such date in the last quarter of each calendar year as may be fixed by the Board of Directors, but other Society meetings may be called by the Board from time to time and shall be called by the President at any time upon the written request of 5% of the [Fellows Voting Members](#). At least two weeks notice of all Society meetings shall be given to the members. At Society meetings, the presiding officer shall vote only in case of a tie.

ARTICLE VIII. - Quorum

A majority of the members of the Board of Directors shall constitute a quorum. Five percent of the [Fellows Voting Members](#) of the Society shall constitute a quorum at every meeting of the Society.

ARTICLE IX. - Public Expression of Professional Opinion

No opinion with respect to questions of public interest shall be publicly expressed by, or on behalf of, the Casualty Actuarial Society, the Board of Directors, or any committee except on matters within the special professional competence of actuaries and then only in accordance with authority given and procedures determined in each instance by the Board and in accordance with the following conditions:

- (i) An opinion of the Casualty Actuarial Society (CAS) shall require advance approval by an affirmative vote of at least ninety percent of the Fellows-Voting Members who vote in a mail ballot. However, the Board of Directors of the CAS may, by a two-thirds vote of all members of the Board, direct the CAS's delegate to the International Actuarial Association (IAA) to vote on behalf of the CAS on a proposed public expression of professional opinion to be issued by the IAA and allow the IAA to list the CAS as a supporting organization of that public expression of professional opinion when the vote is positive.
- (ii) An opinion of the Board of Directors or a committee authorized by the Board to express an opinion shall indicate that it does not purport to represent the views of the Casualty Actuarial Society, but only of the Board of Directors or the committee, as the case may be.

Associate Voting Eligibility

ARTICLE X. - Resignation and Discipline of Members

Any member who is not in default in payment of dues, and against whom no complaints are pending, may resign at any time by filing a resignation request in writing with the Casualty Actuarial Society Office. Notwithstanding the foregoing, the Board of Directors may, in its discretion, approve the resignation of a member in default of payment of dues or against whom a complaint or charge is pending before the Actuarial Board for Counseling and Discipline, the Canadian Institute of Actuaries, or other appropriate investigatory body, or against whom a recommendation for public disciplinary action has been made to the Society by the Actuarial Board for Counseling and Discipline, the Canadian Institute of Actuaries, or other appropriate investigatory body. The Board, on written application of any member who has resigned, may reinstate such member subject to such conditions as it may prescribe.

No member of the Society shall be subject to public disciplinary action except upon action of the Discipline Committee or, in the case of an appeal, the Appeals Panel acting on behalf of the Board of Directors as provided for in appropriate disciplinary body in accordance with the Bylaws of the Society.

Changes to Discipline Process

ARTICLE XI. - Use of Financial Resources: Dissolution

The funds of the Casualty Actuarial Society shall be devoted exclusively to the purposes stated in Article II hereof. No part of the net earnings of the Society shall inure to the benefit of, or be distributable to, its members, Directors, Officers, or other private persons, except that the Society shall be authorized and empowered to pay reasonable compensation for services rendered and to make payments and distributions in furtherance of the purposes set forth in Article II hereof. If the Casualty Actuarial Society is dissolved, all of its remaining assets shall be transferred to one or more organizations organized and operating exclusively for purposes similar to those of the Casualty Actuarial Society and which qualifies as an exempt organization under section 501(c)(3) of the Internal Revenue Code of 1954 (or the corresponding provision of any future Internal Revenue Law).

ARTICLE XII. - Amendments

This Constitution may be amended by an affirmative vote of 10% of the Fellows-Voting Members or two-thirds of the Fellows-Voting Members voting, whichever is greater. Notice of such proposed amendment shall be sent to each Fellows-Voting Member by the Casualty Actuarial Society Office at least one month before the vote is taken.

An amendment to the Constitution can be proposed by a two-thirds majority vote of the Board members voting. Alternatively, an amendment can be proposed by a petition of 5% of the Fellows-Voting Members, unless such petition is vetoed by a two-thirds majority vote of the Board members voting.

Associate Voting Eligibility

CAS BYLAWS

NOTE: Deletions are in strike through; additions are underlined.

(As Amended August 30, 2010)

ARTICLE I. - Order of Business

The Board of Directors shall authorize the procedure for determining the agenda and order of business at all meetings.

ARTICLE II. - Meetings of the Board of Directors

Meetings of the Board of Directors shall be chaired by the immediate past President and shall be called whenever the immediate past President or three members of the Board so request. Notice shall be sent to each member of the Board seven or more days before the time appointed. Such notice shall state the objects intended to be brought before the meeting, and, should any other matter be passed upon, any member of the Board shall have the right to reopen the question at the next meeting. At Board meetings, the presiding officer may vote in all cases.

A two-thirds vote of the Board members voting is required for approval or promulgation of statements of principles.

ARTICLE III. - *Duties of Officers*

SECTION 1.—PRESIDENT

The President shall preside at meetings of the Society and at meetings of the Executive Council. The President shall appoint all committees and shall perform all duties customarily incident to the Office of President and such other duties as may be prescribed by the Board of Directors from time to time.

SECTION 2.—PRESIDENT-ELECT

The President Elect shall have such duties as may be assigned by the President or the Board of Directors. In the absence of the President, or in the event of the President's inability or refusal to act, the President-Elect shall perform the duties of the President.

SECTION 3.—VICE PRESIDENTS

Each of the Vice Presidents shall have such duties as may be assigned by the President or the Board of Directors. In the absence of both the President and President Elect, one of the Vice Presidents shall be designated by the Board of Directors to preside at meetings of the Society.

ARTICLE IV. - *Chief Staff Executive*

The Chief Staff Executive shall be responsible for keeping a full and accurate record of the proceedings of meetings of the Society and of the Board of Directors and for sending notices of such meetings. Subject to the direction of the Board, the Chief Staff Executive shall have immediate charge of the archives of the Society, and shall have charge of the books, pamphlets, manuscripts, and other literary or scientific material collected by the Society.

The Chief Staff Executive shall also be responsible for collecting the annual dues of members, paying all bills for ordinary expenditures incurred by the Society and any other bills as authorized by the Board of Directors, keeping a detailed record of all receipts and expenditures, and presenting an accounting of same at the annual meetings. After the financial statements have been audited and reviewed by a committee appointed by the Board of Directors a financial report will be released reflecting the audited results.

The Chief Staff Executive shall have such other duties as may be assigned by the President or the Board of Directors.

ARTICLE V. - *Elections and Filling of Vacancies*

Procedures for nominations and elections shall be established by a majority vote of the Directors present and voting at a meeting of the Board of Directors. These procedures shall be provided to the membership annually at the beginning of the election process. A majority of the votes cast by [Fellows-Voting Members](#) shall be necessary for the election of the President-Elect. For the election of Directors, the four candidates with the highest number of votes cast shall be elected, subject to a requirement that one-third of the valid ballots cast for Director shall be necessary for the election of a Director.

The Board of Directors may fill vacancies in the term of any Officer or member of the Board. Any Officer so appointed shall serve until the next annual meeting. Any member of the Board so appointed shall serve, subject to ratification by the [Fellows-Voting Members](#) at the next meeting of the Society, until the expiration of the term of office of the Board member being replaced.

ARTICLE VI. - *Discipline of Members*

SECTION 1.—COMPLAINTS AND QUESTIONS

- a. Complaints concerning alleged violations of the Code of Professional Conduct, and all questions which may arise as to the conduct of a member of the Society, in the member's relationship to the Society or its members, or in the member's professional practice, or questions affecting the interests of the actuarial profession, constitute matters for serious consideration.
- b. Such complaints, questions, or requests for advice shall be referred to the national organizations responsible for profession-wide investigation, counseling and/or discipline, e.g., the Actuarial Board for Counseling and Discipline (ABCD) and the Canadian Institute of Actuaries (CIA).

SECTION 2.—REFERRAL AND CONSIDERATION OF PUBLIC DISCIPLINARY ACTION

Acting pursuant to Section 1, and if circumstances warrant, the appropriate investigatory body shall present a recommendation for disciplinary action to the Society. The member whose activities are the subject of the disciplinary recommendation is referred to here as the subject actuary.

Disciplinary action includes a public or private reprimand by, or suspension or expulsion from, the Society.

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If an appropriate investigatory body recommends disciplinary action to the Society, the matter shall be referred to the appropriate disciplinary body.

The CAS Discipline Committee shall be the appropriate disciplinary body for all CAS disciplinary actions unless the disciplinary action is recommended by an appropriate investigatory body and is covered by the terms of any joint agreement for discipline among various actuarial organizations including the CAS. In those cases the appropriate disciplinary body shall be the joint disciplinary panel or other body as provided in such an agreement. Such an agreement and any amendments to such agreement are only binding on the CAS if approved by a two-thirds majority vote of the CAS Board members voting, provided that:

- a) No CAS member will be disciplined unless a majority of the panel judging that CAS member is composed of CAS members and a majority of those CAS members concur with the discipline.
- b) The authority to impose penalties of expulsion or suspension for more than two years for any CAS member will remain with the CAS.

Appeals under such agreement will also be handled in accordance with the provisions of that agreement.

Should the recommended disciplinary action under such agreement require referral to the CAS for final disciplinary action, then the CAS Discipline Committee shall be the appropriate disciplinary body but only with regards to determining disciplinary action consistent with the terms of such agreement.

The remainder of this Article VI refers to matters for which the CAS Discipline Committee is the appropriate disciplinary body.

The CAS Discipline Committee, ~~which~~ shall consider the matter and may take such disciplinary action with respect to the CAS member (the subject actuary) as it deems appropriate in accordance with Rules of Procedure adopted from time to time by the Board of Directors.

The CAS Discipline Committee shall consist of ten Fellows. The Chairperson shall form a Discipline Committee Panel consisting of seven members of the Discipline Committee each time a recommendation for disciplinary action against a member is received from

- (a) an appropriate investigatory body and such recommendation is not covered by any joint agreement for discipline, or
- (b) an appropriate disciplinary body consistent with the terms of such an agreement.

The Discipline Committee Panel shall schedule a hearing at which the subject actuary shall have the right to appear personally and with counsel and/or other advisor (at the subject actuary's expense) to explain why the recommendation of the investigatory body should not be followed. A hearing of the Discipline Committee Panel shall require a quorum to be present, which shall be five members of the Panel.

The Discipline Committee Panel shall provide written notice of this hearing, including the time, date, and place where the Discipline Committee will consider the matter, to the subject actuary not less than 45 days in advance of the hearing date. The 45-day time limit may be waived by mutual written consent of the parties.

A Discipline Committee Panel decision to render an order to publicly reprimand, suspend or expel the subject actuary requires an affirmative vote of at least five members of the Discipline Committee Panel. The decision of the Discipline Committee Panel shall include a written report of its findings and the rationale for the conclusion. The decision of the Discipline Committee Panel action shall be provided to the subject actuary within 30 days after the decision is reached.

The decision of the Discipline Committee Panel shall be considered final and binding unless written notice of appeal is submitted by the subject actuary within 45 days of receipt of the decision of the Panel.

SECTION 3.—APPEALS

The subject actuary shall be entitled to appeal the decision of the Discipline Committee Panel by submitting a written request for an appeal to the CAS President within 45 days from receipt of the Discipline Committee Panel decision.

The CAS President shall designate five members of the Board of Directors as eligible to serve on an Appeals Panel, from which the subject actuary shall select three members to serve on the Appeals Panel. The Appeals Panel shall act on behalf of the CAS Board of Directors and in accordance with the Rules of Procedure.

The full written record, decision, findings and vote of the Discipline Committee Panel shall be made available to the Appeals Panel. The appeal shall be based entirely upon the written record and shall not include any appearance by the subject actuary but may include a written submission by the subject actuary, and any reply submission by the Chairperson of the Discipline Committee Panel.

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The Appeals Panel shall conduct and complete the appeal within 90 days after receipt of the request for appeal. The Appeals Panel may affirm, modify or reverse the decision of the Discipline Committee Panel. A decision to do other than affirm shall require a determination by the Appeals Panel that: (1) the Discipline Committee Panel's factual determinations were clearly erroneous and, absent such errors, a different action is warranted; or (2) the Discipline Committee Panel failed to conform to the Rules of Procedure in a manner that was unduly prejudicial and which led to an unwarranted result; or (3) the disciplinary action imposed by the Discipline Committee Panel was clearly inconsistent with the magnitude of the Code of Professional Conduct violation or the harm that was done. The decision of the Appeals Panel shall require the vote of at least two members of the Appeals Panel.

The Appeals Panel decision shall include a written statement of the Panel's findings and conclusions and shall be provided to the subject actuary, the Chairperson of the Discipline Committee Panel, the Panel members, the CAS President and Chief Staff Executive, the CAS Board of Directors and the authorized representative of the relevant investigatory [or disciplinary](#) body. The Appeals Panel decision shall be final.

SECTION 4.—REINSTATEMENT

An individual who has been expelled may be reinstated only upon request to and approval of the Board of Directors.

SECTION 5.—CONFIDENTIALITY AND NOTIFICATION

All proceedings under this Article shall be confidential in accordance with the Rules of Procedure.

The Board of Directors shall notify the members in all instances in which the Discipline Committee Panel [or other appropriate disciplinary body](#) orders public disciplinary action. Notification shall not be given until the time to appeal has expired or, in the event of an appeal, until such appeal has been resolved. At the same time notification is given to the members, the Board of Directors shall also give notice of any public disciplinary action to the appropriate investigatory [or disciplinary](#) body, all other actuarial organizations of which the individual is a member, and to other persons and organizations, including government entities, which, in the opinion of the Board, should also receive notice of the action as being in the best interest of the public.

In the event of subsequent reinstatement of the member, the Board of Directors shall give notice of such action to all members and to entities previously advised by the Board of the public disciplinary action.

SECTION 6.—CASE REVIEWS

The Board of Directors retains the right to review a decision by a national organization responsible for profession-wide counseling and discipline which does not result in a recommendation for disciplinary action with respect to a CAS member.

ARTICLE VII. - *Indemnification of Officers, Members of the Board of Directors, Committee Members, Presidential Appointees and Employees*

Persons who at any time shall serve, or shall have served, as Officers, members of the Board of Directors, committee members, Presidential appointees, members of any disciplinary board of the Society, or who are employees, or who were employees of the Casualty Actuarial Society (and their heirs, executors, administrators, and personal representatives) shall be indemnified by the Society against all costs and expenses (including but not limited to legal fees, amounts of judgments paid, and amounts paid in settlements) reasonably incurred in connection with the defense of any claim, action, suit, or proceeding, whether civil, criminal, administrative, or other, in which they may be involved by virtue of such persons being or having been Officers, members of the Board of Directors, committee members, Presidential appointees, members of any disciplinary board of the Society, or who are employees, or who were employees of the Casualty Actuarial Society, or in connection with any appeal therein; provided, however, that in the event of a settlement the indemnification herein provided shall apply only when the Board of Directors approves such settlement; and provided further that such indemnity shall not be operative with respect to any matter as to which such person shall have been finally adjudged liable in such claim, action, suit, or proceeding on account of their own willful misconduct.

The rights accruing to any persons under this Article shall be without prejudice to any rights or benefits given by the Board of Directors inconsistent therewith in special cases and shall not exclude any other rights or benefits to which they may be lawfully entitled.

ARTICLE VIII. - *Dues*

SECTION 1.—AMOUNT

The Board of Directors shall fix the annual dues for Fellows, Associates and Affiliates.

SECTION 2.—FAILURE TO PAY

The Casualty Actuarial Society shall be responsible for notifying by mail any Fellow, Associate or Affiliate whose dues may be six months in arrears, and to accompany such notice by a copy of this Article. If a Fellow, Associate or Affiliate shall fail to make payment within three months from the date such notice is mailed, the Fellow, Associate or Affiliate shall cease to be a member, except at the discretion of the Board of Directors this provision may be waived.

SECTION 3.—EXEMPTION, DEFERRAL OR WAIVER

The Board of Directors may, at its discretion and in accordance with established policy, exempt, defer or waive, partially or fully, the dues of any member who submits a written request to the Board of Directors before dues have become six months in arrears, citing the reason for the request.

SECTION 4.—REINSTATEMENT

A Fellow, Associate or Affiliate who has ceased to be a member because of failure to pay dues, or by voluntary resignation, may be reinstated by a majority vote of the Board of Directors upon payment of a reapplication fee, to be set by the Board of Directors, and such payment may be partially or fully waived by the Board at its discretion.

ARTICLE IX. - *Amendments*

These Bylaws may be amended by an affirmative vote of 10% of the [Fellows Voting Members](#) or two-thirds of the [Fellows Voting Members](#) voting, whichever is greater. Notice of such proposed amendment shall be sent to each [Fellow Voting Member](#) by the Casualty Actuarial Society at least one month before the vote is taken.

An amendment to the Bylaws can be proposed by a two-thirds majority vote of the Board members voting. Alternatively, an amendment can be proposed by a petition of 5% of the [Fellows Voting Members](#), unless such petition is vetoed by a two-thirds majority vote of the Board members voting.

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Voters Guide to ACAS Voting and Board Service Eligibility Issues

Introduction

In response to member concerns expressed in the 2008 Quinquennial Membership Survey, the CAS Board of Directors asked the Executive Council to review the status of Associates. The Task Force on Associate Rights was formed in 2009 and charged with evaluating how best to ensure representation within the CAS of Associate members, including such issues as voting rights, leadership opportunities, and dues rates.

The Task Force produced a report in July 2010 and, as a result of its recommendations, members are being asked to consider Associate members' eligibility for voting and for serving in broader capacities than currently allowed. (For more detailed discussion of the issues, see the Report of the Task Force on Associate Rights at <http://www.casact.org/about/reports/associate-rights.pdf>.)

Clarifying the Issues

Similar proposals revising the CAS Constitution and Bylaws were presented to the Fellows for approval in 2006 but failed to achieve the required majority. Many member comments at that time showed a lack of clarity on the issues. Those comments and ones from the 2008 Quinquennial Member Survey indicate that the voting eligibility issue was not clearly separated from the debate on retaining vs. eliminating the ACAS designation, thus making the vote "muddy."

Because the CAS is no longer proposing the elimination of the ACAS designation, the issue should now be much clearer.

Structure of the Voters Guide

This Voters Guide on ACAS Voting and Serving Eligibility includes the following items:

- Highlights of the Vote
- Constitution and Bylaws Changes Sample Votes
- Pro and Con Analysis of the Proposed Revisions
- Supporting Data and Discussion

A marked-up version of the CAS Constitution and Bylaws showing all issues proposed is available beginning on page 16.

Highlights of the Vote

This vote has two clearly distinct components concerning Associates: (1) voting eligibility and (2) Board service eligibility.

Several proposed revisions deal with Voting Eligibility. Two key points to understand are that:

- Extending voter eligibility to Associates will only occur after an individual has been a member five years as an Associate, at which time most Associates will have achieved Fellowship.
- Regardless of the outcome of the vote, eligibility to serve as vice presidents on the Executive Council will continue to be restricted to Fellows.

Only one proposed revision deals with Board service eligibility (Constitution Article V, Sections 1 and 2). This proposal is dependent upon the passage of the Associate voting eligibility issue.

Constitution and Bylaws Changes Sample Votes

Following are three examples of how one can vote on the issues affecting Associates.

<p>If you are <i>against both</i></p> <p>(1) Associates being eligible to vote <i>and</i></p> <p>(2) Associates being eligible for election to the Board, Then vote NO to all changes.</p>	<p>If you are <i>in favor of</i></p> <p>(1) Associates being eligible to vote, <i>but not for</i></p> <p>(2) Associates being eligible for election to the Board, Then vote YES to all changes <i>except</i> the amendment phrase affecting Constitution Article V, Sections 1 and 2.</p>	<p>If you are <i>in favor of both</i></p> <p>(1) Associates being eligible to vote <i>and</i></p> <p>(2) Associates being eligible for election to the Board, Then vote YES to all changes.</p>
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Pro and Con Analysis of the Proposed Revisions

Pros	Cons
<ul style="list-style-type: none"> Given no dues differential, CAS Associates are getting less for their money. Associates are subject to same professional standards as Fellows. Many Associates provide high level of volunteer services to the CAS, yet the lack of a vote makes some feel disenfranchised. The CAS needs to recognize the valuable contribution these Associates provide. Many Associates today have similar work experience to Fellows of years past. Some other actuarial associations around the world have a dual class structure and, in some, Associates are eligible to vote. (See attached chart.) CAS Associates and Fellows often perform similar technical and managerial functions at their companies. This change applies only to those Associates who apparently have stopped taking exams. This recognizes the value to the CAS of these “career Associates.” Numerous examples of contributions of career Associates can be found. Associates are disenfranchised from governance processes that may have direct impacts on their abilities to practice. 	<ul style="list-style-type: none"> There is not much difference in membership benefits, so Associates are getting the same value for their money. Education and practice differentials still exist. CAS Associates still have less experience than CAS Fellows, in most cases. The Associateship curriculum still does not encompass all of the knowledge of Fellowship curriculum. The ACAS designation no longer automatically meets U.S. Appointed Actuary practice requirements. Some other actuarial associations around the world have a dual class structure and, in some, Associates are not eligible to vote. Associates may not be qualified to perform certain technical and managerial functions at their companies. The ACAS designation is an interim status. Associates are expected to continue and become Fellows. Allowing Associates to vote may remove an incentive for them to obtain Fellowship. If Associates want to take part in governance, they can choose to complete the requirements for Fellowship. There is nothing currently preventing Associates from serving on and or chairing most committees. Members voted against this ACAS voting eligibility four years ago. Why are we asking again?

Supporting Data and Discussion of Associate Voting Impact

This Voters Guide provides voters with tables of data for them to consider when casting their votes. A discussion of the data follows Table 3.

Table 1. Differences Between ACAS and FCAS Requirements Over Time

Year	Requirements to Achieve				Fellow†
	Associate				
	# of Exams	Professionalism Course	Validation by Educational Experience (VEE)	Online Courses	# of Exams
1915	4				6
1934	4				8
1941	5				8
1948	4				8
1968	5				9
1976	6				10
1977	7				10
1991	7	Y			10
2000	7	Y			9
2005	7	Y	3		9
2011	6	Y	3	2	9

†Fellowship includes Associate non-exam requirements.

Table 2. Voting and Serving Eligibility for Associates of Some Other Actuarial Associations

Issue	CAS Casualty Actuarial Society	SOA Society of Actuaries	American Academy of Actuaries	UKAP The Actuarial Profession U.K.	IAAust Institute of Actuaries of Australia	CIA Canadian Institute of Actuaries*
Voting Eligibility	No	Yes	Yes**	Yes	No	Yes, after enrollment of 5 years
Hold Elected Office	No	No	Yes	No, but under consideration	No	No
Committee Chair	Most, but not all	Yes, except for Board Committees	Yes	Yes	Yes	Yes
Committee Membership	Yes	Yes, except for Board Committees	Yes	Yes	Yes	Yes
Ratio of Associate Fees to Fellow Fees	100%	55%	100%	66%	63%	30% initially, 85% after 5 years

*Changes approved in June 2011 will be implemented in June 2012.

**The Academy has only one class of membership.

Table 3. Current Relevant Membership Numbers

Membership Category	Number of Members
FCAS	3,711
ACAS (5 years or more)	1,046
“Voting Members”	4,757
ACAS (fewer than 5 Years)	690

Discussion: How many five-year ACAS and FCAS “Voting Members” would need to vote affirmatively for an initiative to pass?

Constitution and Bylaws changes presently require an affirmative vote from 10% of “Voting Members,” or an affirmative vote from two-thirds of the eligible members voting. (Note: a significant percentage of the membership or the Board or both must already be in favor of a change for it to reach a point where it is proposed to the general membership.)

Currently, the 10% means that a minimum of 476 affirmative votes would be needed to ratify a change. Typically, 30% or more of those eligible to vote in the CAS do vote. That would typically be 1,427 voters. With a two-thirds majority requirement, 952 of those 30% would have to vote affirmatively to implement a change.

If the proposed change to voting eligibility passes, it will not be numerically impossible for future changes to pass if only eligible CAS Associates vote in favor. For this to happen, however, a majority of Fellows would have to abstain.

For this example, “Voting Members” means Fellows and five-year Associates.

Election of the President-Elect requires a majority of votes cast. Assuming Fellows and eligible Associates vote in similar proportions, a candidate favored only by Associates would be unlikely to carry the vote.

Candidates for the Board of Directors are presented as a slate and the four candidates with the most votes are elected, subject to a requirement that one-third of the valid ballots are cast for electing a Director, i.e., one-third of the members voting must vote for a Director. Currently, five-year Associates make up about 22% of the membership.

The **percentages of Associates matriculating to Fellowship** by class year have remained relatively constant at about 75% since 1970, as can be seen in the Task Force Report (<http://www.casact.org/about/reports/associate-rights.pdf>).

Overview of Proposed Changes to Discipline Process

Over the past several years, the Council of U.S. Presidents (CUSP), which is comprised of the Presidents and Presidents-Elect of the U.S.-based actuarial organizations, has held ongoing discussions regarding the U.S. actuarial discipline process. As a result of the discussions, CUSP has developed a proposal that it believes will increase the efficiency of the discipline process and create greater consistency among discipline outcomes.

In early May 2011, the presidents of the participating actuarial organizations jointly introduced the proposal to the members of the American Academy of Actuaries, ASPPA College of Pension Actuaries, Casualty Actuarial Society, Conference of Consulting Actuaries, and Society of Actuaries.

Revisions to the CAS Constitution and Bylaws are required to implement the changes within the CAS. During the CAS Board of Directors meeting on May 15, 2011, the Board reviewed the specific changes to the wording of the CAS Constitution and Bylaws that would be needed to allow the CAS to participate in the joint disciplinary process. Following that review, the Board passed a motion to recommend that the Fellows vote to approve the amendments to the CAS Constitution and Bylaws.

The amendments would enable the CAS Board of Directors to enter into an agreement for joint discipline with other participating organizations, while retaining control of the discipline of CAS members. As reflected by the red-lined version of the proposed changes to the CAS Constitution and Bylaws beginning on page 16, the CAS Board, if approved by a two-thirds majority vote of the CAS Board members voting, would be granted the authority to enter into a joint disciplinary agreement, provided that:

a) No CAS member will be disciplined unless a majority of the panel judging that CAS member is composed of CAS members and a majority of those CAS members concur with the discipline.

b) The authority to impose penalties of expulsion or suspension for more than two years for any CAS member will remain with the CAS.

Those requirements are a key feature of the proposed Agreement on Joint Discipline. The April 7 working draft of the Agreement can be reviewed on page 35; however, work on the Agreement is ongoing, particularly with respect to Section 9, which deals with administrative and legal issues.

The April 7 draft was the most current version of the agreement at the time of this printing. An updated version may be available in the Meet the Issues section of the CAS Web Site.

The agreement includes a withdrawal and termination clause, whereby the CAS may withdraw from the agreement at any time upon 30 days written notice to the other parties. The CAS Board of Directors could approve withdrawal from the agreement by a simple majority vote of the CAS Board members voting.

The following items are provided to assist voting members with their understanding of the proposal:

- Letter from presidents of the U.S.-based actuarial organizations
- Set of questions and answers about the proposal
- Hypothetical case study that compares the current process to the proposed process
- Proposed Agreement on Joint Discipline

The proposed changes to the CAS Constitution and Bylaws recommended by the Board for approval on the 2011 elections ballot can be found beginning on page 16. The changes related specifically to the discipline process are indicated in the margins with the label “Changes to Discipline Process.”

Letter from the Presidents of the U.S.-Based Actuarial Organizations

To the members of the

American Academy of Actuaries,
ASPPA College of Pension Actuaries,
Casualty Actuarial Society,
Conference of Consulting Actuaries, and
Society of Actuaries:

Our discipline process is an essential component of each of our organization's proactive approach to ensuring the quality of our professional services. As stewards of our trade, we all share the responsibility to ensure that the actuarial profession's integrity is maintained, and as such, it is our responsibility to ensure our discipline processes are functioning well.

After a review of the profession's current discipline procedures, the leaders of our five organizations concluded last year that our current structure is fundamentally sound. But after being in place for many years, several potential improvements have been identified. These changes aim to improve efficiency and provide greater consistency, and we believe that they will benefit the members of all our organizations.

The proposed enhancements build off of the central features of the current framework, but strive to streamline the discipline and appeals processes. In brief, for members of multiple organizations, the current process has an abundance of burdensome and costly hearings, which can lead to different outcomes. Under the proposal, future disciplinary recommendations will be submitted for determination to a single, representative joint disciplinary panel; all appeals will be considered by a joint appeal panel. This streamlining will reduce the number of hearings and help create greater consistency regarding outcomes.

The boards of directors of our organizations have agreed in principle to move forward to propose these improvements for member consideration. To implement these revisions, each organization will need to make changes to its bylaws and will submit the new discipline process to a vote of its members.

As the presidents of the participating actuarial organizations, we stand together in introducing these enhancements to you. We believe that it is important to our members for our organizations to work together to enhance our commitment to professionalism.

Linked below this letter are two additional resources to help you understand the proposal—a set of questions and answers and a side-by-side comparison of the current process versus the revised process for a sample case study. Additional information will be provided before any organization's members vote.

We realize that no one among us expects to be the subject of a disciplinary proceeding. However, we urge you to be informed voters. After all, each of us has the responsibility to protect our profession's reputation.

We welcome your questions regarding this proposal and have established a centralized mailbox to coordinate responses. Please send your questions to: DisciplineProposal@actuary.org.

Sincerely,

Mary Frances Miller, American Academy of Actuaries
Annie Voldman, ASPPA College of Pension Actuaries
Ralph Blanchard, Casualty Actuarial Society
Adam Reese, Conference of Consulting Actuaries
Donald J. Segal, Society of Actuaries

PS: In our effort to be as comprehensive in our reach as possible, we understand that many members will receive multiple copies of this e-mail. For this, we apologize.

Additional Resources:

Questions & Answers [see page 30.]

Side-by-Side Comparison of the Current Discipline Process and Proposed Process [see page 32.]

Q&A – Joint Discipline Proposal

May 5, 2011

Introduction

In 1992 five organizations, the American Academy of Actuaries, American Society of Pension Actuaries, Casualty Actuarial Society, Conference of Consulting Actuaries and Society of Actuaries, joined together to create a unified discipline process. A robust disciplinary process strengthens adherence to recognized standards of ethical and professional conduct among members of the actuarial profession. It does this by providing guidance to actuaries and considering complaints regarding possible violations of the Code of Professional Conduct. Over the past few years, the leaders of the five actuarial organizations mentioned above reviewed the existing discipline structure. While the current system is fundamentally sound, four issues were identified that, if addressed, could enhance the disciplinary process; a proposal was then developed to address these issues.

Question 1: What issues with the current disciplinary system were identified?

- a. There can be too many hearings.** Under the current system, there are typically two, and potentially three, hearings if the actuary is a member of only one organization: a fact-finding hearing generally at the Actuarial Board for Counseling and Discipline (ABCD), a disciplinary panel hearing at the member's organization and an appeal before another panel at the member's organization should the actuary disagree with the outcome. For each additional participating organization in which the actuary holds membership, there are as many as two additional hearings. For actuaries who are members of three organizations, there could be as many as seven hearings.
- b. There can be inconsistent outcomes.** Due to multiple hearings by different discipline committees of different participating organizations, there have been situations where an individual who is a member of multiple organizations received different levels of discipline for the same offense. There also, currently, are no formal case histories developed that could guide consistent outcomes over time.
- c. There may be a need for more transparency.** Due to the current requirements for confidentiality, there can be an impression that the process is geared toward protecting actuaries rather than protecting the public. This balance between confidentiality and transparency is currently under consideration by a task force.
- d. Failure to address these issues could place the profession's independence in jeopardy.** Due to increased attention by the Federal government over financial services, and reflecting the history of increased regulation of auditors in the U.S. and actuaries in the U.K., the lack of consistent outcomes and lack of transparency makes the profession vulnerable to criticism from the public.

Question 2: What is the basis of the proposed solution?

- A. The current system has worked well for many years, and the proposal retains many of its key features. The ultimate goals are to streamline the process, achieve more consistent outcomes, take the first steps to improve transparency and help reduce the risk to the profession's independence.

In the United States, the ABCD will still perform thorough investigations and make appropriate recommendations. The subject actuary will continue to be judged by a panel of his or her peers. Each organization will retain ultimate control over its membership.

Question 3: How will disciplinary panels be selected and hearings operate?

- A. Under this proposal, disciplinary recommendations, in most cases made by the ABCD (see Question 8), will be submitted for determination to a single representative joint disciplinary panel that is appointed by the leaders of the organizations, rather than being considered separately by each member organization. The disciplinary panel will have majority members in each of the subject actuary's organizations.¹ The disciplinary panel may decide to accept, reduce, dismiss or increase the recommended penalty. Any decision by the panel to impose discipline would be by a supermajority of the disciplinary panel members (see Question 7).

Question 4: How will the appeals process work?

- A. All appeals would be considered by a joint appeal panel – again, appointed by the leaders of the participating organizations – that

¹ There may be rare instances where this is not possible (e.g., where the subject actuary is a member of four or more organizations).

has different members than the disciplinary panel. Grounds for an appeal would be limited to procedural errors or new evidence that was not reasonably available at the time of the disciplinary hearing. The appeal panel would either affirm the decision or remand the case to either a new or the same disciplinary panel. Decisions of the appeal panel are by a simple-majority vote.

Question 5: Would all decisions coming out of the process be final?

- A. If the decision is for no discipline (with or without counseling), a private or public reprimand or a suspension of up to two years, the decision will be final. Recommendations for expulsions and suspensions of more than two years will still be the ultimate decision of each organization; however, an organization cannot reduce the discipline in such cases to less than a two-year suspension. This process would generally reduce the number of formal hearings to two or three, regardless of how many member organizations are involved. It should also result in more consistent decisions over time.

Question 6. Would the ABCD have any new responsibilities under the new process?

- A. Under this proposal, the ABCD also would be charged with developing case summaries to aid future panels and help increase consistency. While identifying details would be removed to protect the subject actuary's confidentiality, these cases would help establish precedent and could be used to educate members.

Question 7: What if a supermajority of the disciplinary panel cannot reach a decision on the penalty?

- A. If at least two members of the disciplinary panel believe that the Code of Conduct has not been materially violated, no discipline would be imposed. Otherwise (i.e., all or all but one of the panelists believe that there was a material violation of the Code), the panel will deliberate until a consensus on the penalty is reached. This penalty would be the highest level upon which all or all but one can agree. The disciplinary panel can also, by simple majority vote, refer the matter to the ABCD or other appropriate investigatory body for counseling, whether or not discipline has been imposed, remembering that counseling is not considered discipline.

Question 8: Does this proposal pertain to me if I work outside of the United States?

- A. The jurisdiction extends to the actuarial practice of the five participating organizations' members in every country. However, under a cross-border agreement between the U.S. based organizations and the Canadian Institute of Actuaries (CIA), the CIA rather than the ABCD, conducts fact-finding hearings on issues related to the practice of an actuary who is a member of a U.S. based organization in Canada, but discipline is determined through the member organizations. Therefore, a member of the SOA, for instance, who is practicing in Canada would be subject to the proposed joint discipline process once a report is received by the leaders of the organizations from the CIA. Similarly, CIA members' actuarial practice in the United States would continue to be investigated by the ABCD and then forwarded on to the CIA. Other cross-border agreements may be negotiated in the future.

Question 9: Are changes to the appropriate investigative bodies' processes also being planned?

- A. These proposals would not change the manner in which the investigative bodies operate. They will continue to investigate cases and make disciplinary recommendations when appropriate.

Question 10: Are other revisions to the disciplinary process being considered?

- A. No other revisions are being considered as part of this proposal. As with any process or procedure, the actuarial disciplinary process is, and should be, evolutionary in nature. The changes being proposed arose because leaders of the organizations recognized that the current system needed improvement. The participating organizations will continue to regularly examine and recommend improvements to this process. In particular, transparency issues associated with the process are currently being considered by a task force.

Question 11: What is the governing body of the joint discipline process?

- A. The governing body is the Joint Discipline Council, which is comprised of the presidents and presidents-elect of the participating organizations. Work is ongoing on the formal structure.

Question 12: What's the process to get this proposal considered and enacted?

- A. The boards of the participating organizations have approved in principle to move forward to propose these improvements to the discipline process for member consideration and directed a joint implementation task force to finalize the details of the proposal. Any changes to the disciplinary system would require amendments to the various organizations' bylaws or constitutions, which require approval by the organizations' boards of directors and, ultimately, members. (The specific process for approval of bylaws or constitution amendments varies among the organizations.) Input from members is encouraged but keep in mind that the proposal must meet the needs of each of the five participating organizations.

The Actuarial Discipline Process: Before and After

A

fter a review of the actuarial profession's current discipline procedures, it was concluded that changes could improve the efficiency of the process and provide for greater consistency of discipline outcomes.

To illustrate how the proposed changes will streamline the process, the hypothetical example below follows a discipline case through the current process and the revised process.

For purposes of this example, the Subject Actuary is practicing in the United States and is a member of three actuarial organizations: Casualty Actuarial Society (CAS), American Academy of Actuaries (Academy), and the Conference of Consulting Actuaries (CCA).

Before – The Current Process

Complaints and Referrals

A complaint of a violation of the Code of Professional Conduct is referred to the Actuarial Board for Counseling and Discipline (ABCD).

Review and Investigation Process

The ABCD reviews the complaint and decides that the complaint has merit. The ABCD engages an investigator to investigate the complaint and prepare a report on the findings.

After reviewing the investigator's report, the ABCD agrees the complaint should move forward and recommends a fact finding hearing with the investigator and Subject Actuary.

Following the fact finding hearing, the ABCD decides to recommend discipline. The ABCD prepares a report recommending discipline and sends the report and the transcript of the hearing to the three organizations of which the Subject Actuary is a member.

After – The Revised Process

Complaints and Referrals

A complaint of a violation of the Code of Professional Conduct is referred to the Actuarial Board for Counseling and Discipline (ABCD). [Same as current process.]

Review and Investigation Process

The ABCD reviews the complaint and decides that the complaint has merit. The ABCD engages an investigator to investigate the complaint and prepare a report on the findings. [Same as current process.]

After reviewing the investigator's report, the ABCD agrees the complaint should move forward and recommends a fact finding hearing with the investigator and subject actuary. [Same as current process.]

Following the fact finding hearing, the ABCD decides to recommend discipline. The ABCD prepares a report recommending discipline and sends the report and the transcript of the hearing to the three organizations of which the Subject Actuary is a member. Each of the organizations then forwards the package to the Joint Discipline Council, which is comprised of the presidents and presidents-elect of the organizations.

Before – The Current Process (continued)**Disciplinary Panels**

Upon receipt of a disciplinary recommendation, each of the three organizations of which the Subject Actuary is a member initiates its internal discipline procedures.

In the CAS, the matter is referred to its standing Discipline Committee, which schedules a hearing and appoints a discipline panel from among its members for this case.

In the Academy, the matter is referred to a Disciplinary Committee selected for this particular case by the Academy President, which schedules a hearing.

In the CCA, the matter is referred to a Disciplinary Committee selected for this particular case by the CCA President, which schedules a hearing.

Disciplinary Hearings

In the CAS, a disciplinary hearing is held under procedures established by the CAS. The Subject Actuary may appear at the hearing.

In the Academy, a disciplinary hearing is held under procedures established by the Academy. The Subject Actuary may appear at the hearing.

In the CCA, a disciplinary hearing is held under procedures established by the CCA. The Subject Actuary may appear at the hearing.

Disciplinary Panel Decisions

The CAS discipline panel decides that the Subject Actuary should be publicly reprimanded.

The Academy discipline committee decides that the Subject Actuary should be privately reprimanded.

The CCA discipline committee decides that the Subject Actuary should be suspended from the organization for one year.

Appeal of Disciplinary Panel Decisions

The Subject Actuary notifies the CAS that its decision will be appealed, initiating the CAS appeals process.

The Subject Actuary notifies the Academy that its decision will not be appealed.

The Subject Actuary notifies the CCA that its decision will be appealed, initiating the CCA appeals process.

After – The Revised Process (continued)**Disciplinary Panel**

Upon receipt of a disciplinary recommendation, the Joint Discipline Council appoints a Disciplinary Panel. The Disciplinary Panel will have a majority of members in each of the participating organizations of which the Subject Actuary is a member.

This may be achieved by appointing one or more panelists who have membership in two or more of the member's participating organizations.

Note: In the revised process, one representative Disciplinary Panel replaces the three separate panels that are currently required in this example.

Disciplinary Hearing

The Disciplinary Panel holds a hearing to consider the matter under the joint discipline provisions. The Subject Actuary may appear at the hearing.

Note: In the revised process, one disciplinary hearing replaces the three separate hearings that are currently required in this example.

Disciplinary Panel Decision

The Disciplinary Panel decides that the Subject Actuary should be publicly reprimanded.

Note: The revised process avoids the situation in which separate disciplinary panels decide on different levels of discipline for the same offense.

Appeal of Disciplinary Panel Decision

The Subject Actuary notifies the Joint Discipline Council that the Disciplinary Panel decision will be appealed, initiating the appeals process.

The grounds for the appeal must be stated, which are limited to a purported procedural error or presentation of new evidence that was not reasonably available earlier in the case.

Before – The Current Process (continued)

Appeal Hearing and Decisions

In the CAS, an appeals panel meets to review the written record and the panel affirms the decision reached by the discipline panel. The appeals panel decision shall be final.

In the CCA, the appeal is to the CCA Board of Directors that reviews the written record and affirms the decision reached by the discipline committee. The Board decision shall be final.

Penalty Implementation

The CAS prepares a public statement of reprimand that is announced according to CAS procedures.

The Academy discipline committee drafts and sends to the Subject Actuary a private reprimand.

The CCA Board of Directors prepares a notice of suspension to the Subject Actuary. This notice is distributed as determined by CCA procedures.

After – The Revised Process (continued)

Appeal Hearing and Decision

An Appeal Panel is formed by the Joint Discipline Council that meets the same selection criteria as set forth for Disciplinary Panels. The Appeal Panel holds a hearing and affirms the decision reached by the Disciplinary Panel. The Appeal Panel decision shall be final.

Note: In the revised process, one appeal process replaces the two separate appeals that are currently required in this example.

Penalty Implementation

The decision of the Appeal Panel to affirm the Disciplinary Panel decision of public reprimand is communicated to the Disciplinary Panel and the ABCD. The Disciplinary Panel prepares the appropriate reprimand in consultation with the ABCD. This is then sent to the CAS, Academy, and CCA and distributed according to each organization's procedures.

Note: The revised process avoids the situation in which separate disciplinary penalties are implemented for the same offense.

Agreement on Joint Discipline

Draft, April 7, 2011

[The April 7 draft was the most current version of the agreement at the time of this printing. An updated version may be available in the Meet the Issues section of the CAS Web Site.]

This Agreement on Joint Discipline (“Agreement”), dated as of _____, is entered into by and among the undersigned organizations (individually a “Party” and collectively the “Parties”).

WHEREAS, the Parties are independent professional actuarial organizations, and wish to enhance the efficiency and consistency of disciplinary proceedings relating to their respective members; and

WHEREAS, the Parties agree that it is in the best interests of their members to establish a joint disciplinary process aimed at reducing the potential number of proceedings to which a member could be subject, and reducing inconsistency in disciplinary determinations among the respective organizations;

NOW THEREFORE, the Parties, in consideration of the promises and covenants contained herein, do hereby agree as follows:

1. **Joint Discipline Council.** The Presidents and Presidents-Elect of the Parties shall make up the Joint Discipline Council (“Council”), and shall have the rights and duties set forth in this Agreement. The Council shall elect a chairperson pursuant to procedures established by the Council. Unless otherwise provided herein, decisions of the Council require a majority vote, with at least one representative from each Party voting with the majority.
2. **Disciplinary and Appeal Panel Member Pool.** The Council shall establish and oversee a pool of potential Disciplinary and Appeal Panel members (“Pool”) from the Party organizations. Individuals shall be appointed to the Pool in accordance with procedures established by the Council, and the respective bylaws, rules and policies of the Parties.
3. **Consideration of Disciplinary Action.**
 - A. A disciplinary proceeding shall commence upon the issuance of a recommendation to discipline a member of one or more of the Party organizations (the “Subject Actuary”) from the Actuarial Board for Counseling and Discipline or other appropriate body with authority under a cross-border agreement to investigate and make findings with respect to the conduct of such member (“Referring Body”). Pursuant to this Agreement, such recommendations shall be referred by the relevant Party organizations to the Council. Upon receipt of such a disciplinary recommendation, the Council shall appoint a Disciplinary Panel, including a chairperson, to consider and act upon the recommendation. The Disciplinary Panel shall be selected from the Pool, pursuant to procedures established by the Council.
 - B. The composition of the Disciplinary Panel selected to consider and act upon a disciplinary recommendation shall meet the following requirements:
 1. At least one Disciplinary Panel member shall be appointed by the Council representatives for each of the Party organizations of which the Subject Actuary is a member.
 2. The Disciplinary Panel shall have majority members in each of the Party organizations of which the Subject Actuary is a member, unless the Council, in its sole discretion, determines that compliance with this requirement is not feasible.
 3. Each Disciplinary Panel member shall be a member of at least one of the Party organizations of which the Subject Actuary is a member.
 - C. The Disciplinary Panel shall hold a hearing to consider the matter unless both the Subject Actuary and the Disciplinary Panel agree that it need not be held. The Subject Actuary shall have the right to appear personally and with counsel (at the Subject Actuary’s expense) at such hearing to explain the member’s position concerning the recommendation of the Referring Body. The role of the Subject Actuary’s counsel shall be limited to advising the Subject Actuary and articulating appropriate legal objections; the role of the Disciplinary Panel’s counsel shall be similarly limited.
 - D. If an investigator was appointed by the Referring Body to assist in reviewing the matter at issue, such investigator may be requested by the Disciplinary Panel Chairperson to appear and present a report at the Disciplinary Panel hearing.
 - E. The Disciplinary Panel may dismiss the matter or take disciplinary action. Disciplinary action may include a private reprimand, public reprimand, suspension of membership, or expulsion. The Disciplinary Panel may also refer the matter to the Actuarial Board for Counseling and Discipline or other appropriate Referring Body to counsel the Subject Actuary, whether or not the Disciplinary Panel decides to impose discipline. Counseling shall not constitute discipline.

- E. Disciplinary action requires an affirmative vote of a supermajority of the entire membership of the Disciplinary Panel. For purposes of this Agreement, a “supermajority” shall be defined as all or all but one of the entire membership of the Disciplinary Panel. A decision to refer the Subject Actuary for counseling requires a simple majority vote of the entire membership of the Disciplinary Panel.
- G. A decision by the Disciplinary Panel to privately reprimand, publicly reprimand, or suspend a Subject Actuary for a period up to and including 2 years shall be effective 45 days after the date of the action, if the Subject Actuary does not appeal the decision. If the Subject Actuary appeals the decision, the action shall be effective as set forth in Section 4. A dismissal shall be effective when the decision is rendered.
- H. A decision by the Disciplinary Panel to suspend a Subject Actuary for more than two years or expel the Subject Actuary shall be referred to the Party organization(s) of which the Subject Actuary is a member for a final disciplinary decision, if the Subject Actuary does not appeal the Disciplinary Panel’s action. The Party organization(s) may affirm the decision of the Disciplinary Panel, or reduce the discipline to no less than a suspension of two years, with such action being effective on the date of the Party organization’s decision. If the Subject Actuary appeals the action of the Disciplinary Panel, the action shall be effective as set forth in Section 4.

4. Appeals. A Subject Actuary against whom a decision of private reprimand, public reprimand, suspension, or expulsion has been rendered shall be entitled to appeal such a decision on the grounds of a material procedural error by the Disciplinary Panel, or the existence of new evidence that was not reasonably available during the Disciplinary Panel proceedings. Appeals shall be subject to the following:

- A. The notice of appeal shall be in writing, and shall state the specific grounds for the appeal.
- B. The Council shall select an Appeal Panel from the Pool meeting the same selection criteria as those set forth in Section 3 for Disciplinary Panels. No member of a Disciplinary Panel may serve on the Appeal Panel considering the same matter.
- C. All rights and privileges of membership in the Subject Actuary’s Party organization(s) shall be retained during the pendency of the appeal.
- D. The Subject Actuary may appear personally and with counsel (at the Subject Actuary’s expense) before a hearing of the Appeal Panel to explain the Subject Actuary’s position concerning the Disciplinary Panel’s determination and the basis for appeal. The role of the Subject Actuary’s counsel shall be limited to advising the Subject Actuary and articulating appropriate legal objections; the role of the Appeal Panel’s counsel shall be similarly limited. A hearing need not be held if both the Subject Actuary and the Appeal Panel agree that it not be held.
- E. The scope of the Appeal Panel’s review shall be limited to determining whether there was a material procedural error in the Disciplinary Panel proceedings, or whether new evidence exists that was not reasonably available during the Disciplinary Panel proceedings. The decision of the Disciplinary Panel may be affirmed, or remanded to the Disciplinary Panel with instructions for further proceedings. In the case of a remand, the matter shall be remanded to the Disciplinary Panel that previously considered the matter, unless the matter is remanded due to a procedural defect in the composition of the original Disciplinary Panel, in which case the matter shall be remanded to a new Disciplinary Panel convened by the Council. An action of the Appeal Panel requires a simple majority vote of the entire membership of the Appeal Panel.
- F. The decision of the Appeal Panel to affirm a Disciplinary Panel decision shall be effective on the date the appeal is decided. However, in the event the Appeal Panel decision affirms a suspension of greater than two years or an expulsion, such decision shall be referred to the Party organization(s) of which the Subject Actuary is a member for a final disciplinary decision. The organization may affirm the decision, or reduce the discipline to no less than a suspension of two years. Such action shall be effective on the date of the organization’s decision.

5. **Reinstatement.** An individual who has been expelled or suspended from any of the Party organizations may be reinstated only through an action of the Board of Directors of such organization, or as otherwise provided by the bylaws or internal procedures of that organization.
6. **Confidentiality of Proceedings.** Except as otherwise provided herein, or by waiver of the Subject Actuary, all proceedings under this Agreement shall be confidential. Notwithstanding the foregoing, information concerning the facts and dispositions of decided cases (redacted to omit the identity of the Subject Actuary in cases in which private or no discipline was imposed) shall be available to Disciplinary Panels or Appeal Panels for the purpose of assisting in such Panels' consideration of other matters pending before them. Such redacted case information may also be made available to members of the Party organizations for educational purposes. If the Subject Actuary discloses any aspect of these confidential proceedings, the Parties may research the source and manner of the disclosure, and reserve the right to respond to such disclosure by providing factual information about the proceedings.
7. **Notifications.**
- A. Final decisions of Disciplinary and Appeal Panels shall be transmitted to the organizations of which the Subject Actuary is a member, the Referring Body, the Subject Actuary and, in cases of public discipline, to other organizations, such as government entities or news organizations, designated by the Disciplinary Panel to receive such notice under procedures established by the Council. If the case arises from a written complaint and public discipline has been imposed, notice of the disposition shall also be furnished to the complainant. Disciplinary notices shall include a summary of the facts involved, the Code of Conduct precepts found to have been materially violated, and the discipline imposed.
 - B. The Parties shall notify their members of all instances in which public discipline, including a public reprimand, suspension or expulsion, has been imposed on one of their members. Such notification should occur within a reasonable period of time after the action has taken effect as described above.
 - C. In the event of subsequent reinstatement of an expelled or suspended member, the Parties shall give notice of such action to all their respective members and also to entities previously advised under this Agreement of the expulsion or suspension.
8. **Procedures.** The Council shall establish procedures not inconsistent with the provisions herein for implementation of this Agreement. Procedures, or amendments thereto, shall be effective upon approval of two-thirds of the members of the Council, including at least one member from each Party, following exposure to members of the Party organizations for comment for a period of not less than 30 days.
9. **Funding, Operational, Administrative and Other Matters.** The Parties shall agree on an appropriate allocation of funding, operational and administrative responsibilities related to this Agreement, as well as on other matters associated with its implementation.
10. **Effective Date.** This Agreement shall be effective for cases referred to the Council by a Referring Body on or after July 1, 2012.
11. **Amendments.** This agreement may be amended only with the written consent of all the Parties. Any Party may propose an amendment to this Agreement pursuant to procedures established by the Council.
12. **Withdrawal and Termination.** Any Party hereto may withdraw from this Agreement upon 30 days written notice to the other Parties. In the event that a Party submits such written notice, all cases relating to members of that Party for which there has been an initial selection of a Disciplinary Panel by the Council at the time of that notice shall conclude under the terms of this Agreement. In the event any Party withdraws from this Agreement, it shall remain valid as to the other Parties. This Agreement shall terminate upon the agreement of the then existing Parties thereto, or automatically upon the withdrawal of all of the Parties from the Agreement.

SIGNATURES OF THE PRESIDENTS OF THE SIGNING PARTIES APPROVING THIS AGREEMENT WILL BE INCLUDED HERE.

President-Elect Nominee



Gary R. Josephson

FCAS 1982

Consulting Actuary, Milliman, Inc.

I am honored to be a candidate for President-Elect. As our Centennial Year approaches, we are well positioned to continue our growth (in numbers, capabilities, and geography). In doing so, we need to continue to ensure that casualty actuaries are relevant, both in our current areas of expertise and in the expanding areas of risk management.

I am confident that we will do so. My role, as part of the CAS Executive Team, will be ensuring that the appropriate resources are used to respond to issues, set and act upon strategic initiatives, and advance the purposes of our Society.

Board Director Nominees



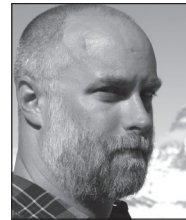
Shawna Ackerman

FCAS 1996

Chief Actuary, California Earthquake Authority

I want to continue taking an active role in the ongoing promotion and improvement of our profession. The CAS has an important role to play in representing the interests of the actuarial community and promoting the relevance of the casualty actuary in the business, public, and regulatory environments. My diverse work experience gives me a broad perspective of where actuaries are valued and where there is room for improvement, both in expanding our areas of practice and promoting our profession nationally and internationally.

I am eager to apply my experience and leadership to the service of the CAS Board.



Steven D. Armstrong

FCAS 1996

Senior Actuary, Allstate Insurance Company

I like Shakespeare. I like to quote Shakespeare. One quote that is particularly relevant is "Action is eloquence." I am action-oriented and know when to call a spade a spade. I embody this quote in everything I do and look forward to bringing this leadership style to the CAS Board of Directors.

Don't forget, "Brevity is the soul of wit."



Kevin Burke

FCAS 2009

Actuary, Alfa Mutual Insurance Company

As an actuary at a regional insurer, I am confronted daily with a variety of projects and interact with insurance professionals in various departments. These experiences have taught me to look at the profession in a broad light. I hope to bring that perspective to the CAS Board. There are many challenges in our future. Among those challenges are how we educate ourselves and how we interact with our colleagues on national and international levels. I want to help find a way for the CAS to solidify its place as the preeminent actuarial organization devoted solely to property-casualty insurance.

MEET THE CANDIDATES.....

Board Director Nominees



Richard Easton

FCAS 1982

Assistant Vice President and Actuary, CNA Insurance Companies

The CAS Board is trusted by the membership to represent its members' interests to other actuarial groups and to the business community in general. In issues such as continuing education and mutual recognition, the emphasis should be on ensuring that the CAS credential reflects expertise that is respected in the marketplace. Unnecessarily onerous continuing education requirements and unnecessarily lax mutual recognition rules both pose threats to this.



Annette Goodreau

FCAS 1997

President, Goodreau Doll LLC

We need fresh perspectives in this rapidly evolving market for our services. I have extensive traditional experience but currently have been working outside the insurance industry. I want to help the CAS creatively bridge the gap between our traditional role and the actuary of the future. I want the Board to concentrate on big issues, like our international role and ERM. But we must also remain connected to our roots: let the world know we are better at ratemaking than statisticians! Above all, the Board represents the members. We must ask them, never tell them, what they need.



Nasser Hadidi

FCAS 2001

Professor, University of Wisconsin

For me, it is all about giving back. I have benefitted enormously, primarily intellectually but also otherwise, from the FCAS designation. Many people had to work very hard to make that possible for me. I should do no less to help provide others with the same opportunity.

Thus I have served CAS in various volunteer positions since being admitted as a member. My interests have been primarily in admissions, notably syllabus and exam committees.

I have both an extensive academic as well as consulting background, and can therefore provide the Board with a unique perspective, which will surely be beneficial.



James "Jim" R. Merz

FCAS 1999

Chief Actuary, Hanover Insurance Group

Jim has twenty years of experience in the insurance industry at insurance companies. His perspective is a balanced approach considering the valuable history of the CAS with the ever-changing global environment. Just like other FCAS, Jim values the credentials that he earned and believes that the high standards of the past are appropriate for the future. He believes that the CAS must change to continue as the preeminent casualty actuarial society of the world, but thinks that the membership should be consulted regarding changes before decisions are finalized. Finally, the Board position comes with a responsibility to the membership.



Deborah M. Rosenberg

FCAS 1984

Consulting Actuary, RSM McGladrey

The function of the Board of Directors is to chart the future course of the CAS with a focus on its mission and vision statements. The process consists of an open discussion of all aspects of the issues under consideration. I bring to the table over 25 years of involvement in many areas of the CAS, including research, long-range planning, program planning, and governance. I have worked as a company actuary, a regulator, and currently as a consultant. These different perspectives will be a significant benefit in Board deliberations.

Online Tools Track CE Requirements

The new CAS Continuing Education Policy will first apply to Actuarial Services rendered on or after January 1, 2012. In order to continue to provide Actuarial Services during 2012, members must satisfy the continuing education requirements of the Policy.

All ACAS and FCAS members are subject to the Policy; ACAS and FCAS members who perform Actuarial Services are subject to the CE requirements.

Members must maintain a log of their CE activity to document that they have met the continuing education requirements. The CAS plans to randomly audit 1% of the continuing education logs for members who have attested their compliance with the Policy each year. In addition, the CAS Board of Directors agreed that 100% of the Board and Executive Council members (excluding appointed directors and the Executive Director) will be subject to the annual audit regarding compliance with the CAS CE Policy.

Information to be included in the log must be sufficient to demonstrate compliance with the continuing education requirements by which the actuary asserts compliance and includes: the date of the activity, a brief description of the activity,

the sponsoring organization, the number of credits earned, whether the credit was self-study or structured (organized, if using the U.S. Qualification Standards for compliance); and the subcategory for which the credit applies (i.e., professionalism, job-relevant topics, or business and management skills). Members will not be required to retain any proof other than this log of CE activity.

Need a log? Both the American Academy of Actuaries and the Canadian Institute of Actuaries provide easy-to-use online recordkeeping tools that enable actuaries to quickly, conveniently, and securely self-report CE credits using a single Web-based system. In addition, the CAS has provided a sample log in PDF format in the Professional Education section of the Web Site. These are all examples for your consideration, though any format that meets the description above will be acceptable.

Be prepared! Ensure that your CE log is up-to-date and includes the information required by the CAS CE Policy.

Members are encouraged to review the complete CE Policy for all of the details on the CE requirements. The policy, along with the complete list of FAQs and responses, is available on the CAS Web Site. [AR](#)

CAS Down Under

Rade Musulin, CAS Liaison to the Institute of Actuaries of Australia, organized a meeting of the CAS Down Under (CASDU) for CAS members attending the International Actuarial Association meeting in Sydney last April. Thirty-three actuaries and their guests attended the reception and dinner, which was a great opportunity to meet with colleagues who reside in Australia. Aon Benfield sponsored the evening's festivities. [AR](#)

In front are Richard Roth (left) and Rade Musulin. Standing (left to right) are Jeff Yeung, Tony Beirne, and Bob Conger.

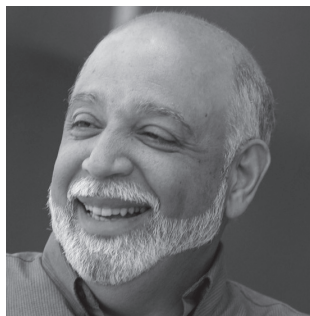


Miccolis and Heppen Win Hachemeister Prize

The CAS Hachemeister Prize Committee has awarded the 2011 Charles A. Hachemeister Prize to Robert S. Miccolis and David E. Heppen for their paper, “A Practical Approach to Risk Margins in the Measurement of Insurance Liabilities for Property and Casualty (General Insurance) under Developing International Financial Reporting Standards.” CAS Vice President-Research & Development Louise Francis announced the winners at the 40th ASTIN Colloquium in Madrid, Spain, on June 20.

Designed to promote property/casualty-oriented papers published in an international forum, the Hachemeister Prize was created to honor Charles Hachemeister’s many contributions to Actuarial Studies in Non-Life Insurance (ASTIN) and his efforts to establish a closer relationship between the CAS and ASTIN. Papers eligible for the prize are those that were published in the previous year’s *ASTIN Bulletin* or presented at the previous year’s ASTIN or AFIR Colloquia.

The winning paper was presented in the Non-Life (ASTIN) track at the 2010 International Congress of Actuaries in Cape Town, South Africa in March 2010. (There are no ASTIN or AFIR Colloquia in the year of an International Congress.) The Hachemeister Prize Committee, chaired by David Cummings, narrowed the papers down to one winner out of a pool of more than 70 eligible papers. Judging criteria includes the impact to the industry and practicality of application as well as originality, readability, and completeness.




Robert S. Miccolis



David E. Heppen


The winning paper presented the authors’ views on practical approaches to consider when calculating risk margins in the measurement of insurance liabilities for property and casualty (also referred to as general insurance or non-life) insurance contracts. In particular, the paper focuses on the use of an approach to estimate risk margins that:

- (1) Recognizes risk and uncertainty in the amount and timing of future payments needed to satisfy insurance liabilities.
- (2) Reflects an objective assessment and measurement of risk for insurance liabilities and the price of risk in terms of the amount an insurer would rationally pay to be relieved of the insurance contract obligations that underlie such liabilities.
- (3) Provides useful financial information for users of IFRS financial statements.

The authors will present their prize-winning paper at the 2011 CAS Annual Meeting in Chicago. 

2011 CAS Trust Scholarship Awarded

The CAS awarded Danielle Gilmour of the University of Connecticut and Kevin Owens of the University of Iowa each a \$2,000 scholarship as part of the 2011 CAS Trust Scholarship Program. The scholarship objective is to further students’ interests in the property/casualty actuarial profession and to encourage the

pursuit of CAS designations. Each candidate must be a full-time student at a college or university, demonstrate high scholastic achievement, and have taken at least one exam. A selection committee of CAS members assesses the candidates’ academic records, two letters of recommendation, and four-page essay. Congratulations to the winners! 

New Fellows Admitted Spring 2011



Row 1, (left to right): Katherine Therese Werner, Sophia Cyma Banduk, Esperanza Borja, Ashley Arlene Reller, **CAS President Ralph S. Blanchard**, Jonathan Laux, Randall K. Motchan, Huiyan A. Zhou, Caryl Marie Fank, Elizabeth Louise Cohen.

Row 2, (left to right): Joseph David Rakstad, Jennifer Rae Schwartz, Sandy Wu, Gang Richard Xu, Vinu Kuriakose, Xingzhi Wu, Lindsay Aaron Roy, Matthew Ryan Purdy, Hsing-Pei Chen, Virginia M. Zeigler.

Row 3, (left to right): Christopher J. Loyd, Nicholas Thoenke, Robert Jerome Foskey, Chad P. Wilson, Evgueni Venkov, Kevin M. Cleary, Michael Brandon McPhail, Christopher T. Andersen, Grant C. Owens.



Row 1, (left to right): Jing Li, Samantha Lynn Nieveen, William Paul Borgen, Kai Kang, **CAS President Ralph S. Blanchard**, Xiaoyan Ma, Jess B. Broussard, Jeffrey N. Rotb, Lian-Ching Lim.

Row 2, (left to right): Iva Yuan, Christie Lai Yin Lee, Karen B. Buchbinder, Susan C. Hendricks, Chad Alan Davis, Leigh Maurice Dubig, Jennifer Lynn Kaye, Irina Viktorovna Odushkin, Richard Brian Levy, Alanna Catherine Anderson.

Row 3, (left to right): Matthew Thomas Laitner, Rodney Christopher Kleve, Joseph A. Milicia, Kavame Akil Davis, Bridget Jonnsson, Jeremy M. Lehmann, Charles Chaoyuen Lee, Douglas E. Pirtle.

New Fellows not pictured: Amel Arbab, Andra Catalina Ban, Richard F. Burke, Meng-Fang Chung, Robert Alan Cole, Li Cui, Patrick Arthur Fillmore, Minh-Huyen Nguyen, Robert V. Phipps.

New Associates Admitted Spring 2011



Row 1, (left to right): Julieta A. Zambrano, Tanya D. Havlicek, Rebecca Lyn Pettingell, Kaushika Sengupta, **CAS President Ralph S. Blanchard**, Haoxuan Cheng, Tracy Leslie Valentine, Matthew Charles Van Vleet, Emily Stone Allen, Eric J. Schmidt.

Row 2, (left to right): Jennifer R. Fiorita, Kim Ho Lo, Christine Doyle, Jonathan C. Abbott, Robert Emmet Lighthizer Jr., Dana Tung Chang, Margaret Hendrix Glenn, Kayne M. Lammers, Emilie Rovito Dubois.

Row 3, (left to right): Sarah Jane Leszczuk, Emily A. Lyons, Zachary Samuel Webber, Steven Ray Lindley, Adrian Ralph Wood, Phillip Anthony Victory, Thomas M. Prince.



Row 1, (left to right): Albert H. Johnson, Jarod James Breuster, Tetteh Otuleye, Kim Dorani, **CAS President Ralph S. Blanchard**, Jared A. Helms, Shu Fang, Joyce Cheuk Chi Li, Brian M. Ironside, Elizabeth E. End.

Row 2, (left to right): Alexander F. Morrone, Olivier Elie Quesnel, Michael J. Reynolds, Nan Zhang, Rochelle M. Pereira, Leigh Miselis, Michael Scott Foulke, Melissa Nowalk, Aleksandra V. Orlova, Etienne Trudel, Nicole Kristen Belmonte, Arlene M. Richardson, Andrew S. Herman.

New Associates not pictured: Subhayu Bose, Paul Andrew Brezovec, Amy M. Chang, Aritra Chatterjee, Cynthia Cheng, Ryan Michael Conrad, Michael Epstein, David Anthony Gamble, Demetria Anne Gianopoulos, David Itzkowitz, Michael J. Lavazza Jr., Chiouray Lin, Bradley W. Lippowiths, Brian Michael Lubeck, Carrie F. Müller, Laura Ann Motil, Brett A. Parmenter, Robert M. Sanders, Philip Traicus, Ming Yi Wong, Bei Zhou.

Reserve Risk in Risk-Based Capital Formulas

As the European Union moves toward implementing Solvency II and the NAIC considers its Solvency Modernization Initiative, a great deal of reliance is being placed on the ability of our stochastic loss reserve models to predict high percentiles of our loss reserve outcomes. There are many stochastic loss reserve models that claim to make these predictions, but are any of these predictions right?

A related and hotly debated topic in solvency regulation is one of time horizon. The issue is that an insurer should hold sufficient capital to cover liabilities that may emerge during the time horizon. Over the past few years I have talked with many who favor an infinite time horizon, reasoning that if an insurer were to cease operations tomorrow, it should have enough capital to cover its remaining liabilities. Those who favor a shorter time horizon (one year in Solvency II) argue that going-concern insurers can use anticipated cash flows to cover unanticipated shortfalls.

At this point I have not made up my mind on these subjects. My goal in this column is to discuss some empirical analyses that I have done that are relevant to these problems. These analyses were done for commercial auto only and cannot be considered conclusive. But, as I hope you will see below, they do provide us with some challenges.

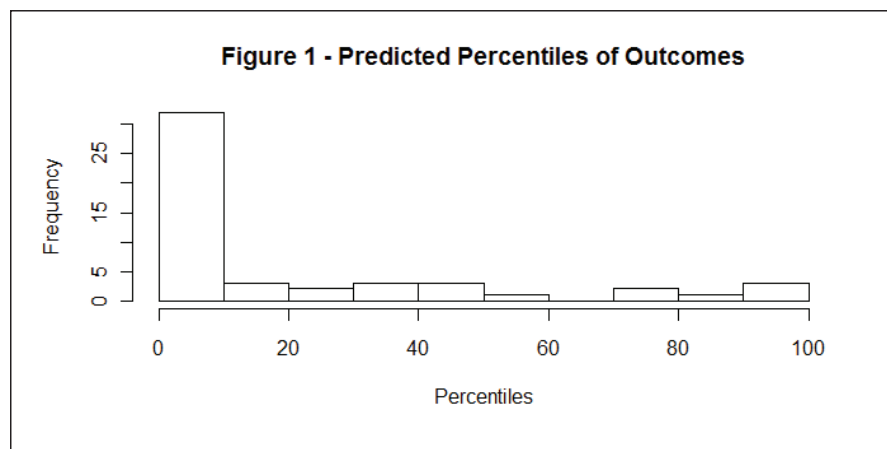
Let's recall my last column ("Retrospective Tests for Stochastic Loss Reserve Models, *AR*, May 2011) where I introduced the new CAS Loss Reserve Research Database.¹ This database consists of 1997 Schedule P loss triangles for several insurers that cover accident years 1988 through 1997. The database also contains subsequent paid and incurred losses, i.e., holdout data, for those accident years that were derived from subsequent Schedule Ps. The purpose of the database was to retrospectively test the predictions of various loss reserve models.

Given that loss reserves estimates are frequently done using customized analyses by actuaries, it is difficult to draw conclusions from a retrospective analysis of a single insurer.

However, it is possible to test estimates based on a specific model when applied to multiple insurers. That is what Peng Shi and I do in a paper titled "The Retrospective Testing of Stochastic Loss Reserve Models," which I will have presented at June's ASTIN Colloquium in Madrid. In that paper we estimate predictive distributions of the sum of the paid losses in the holdout data for each of 50 insurers. We do this for two state-of-the-art models: one a bootstrap chain ladder model and the other a Bayesian model. Next we calculate the percentiles of the sum of actual paid losses in the holdout data for each of the 50 insurers.

For a valid model, we should expect these percentiles to be uniformly distributed. For both the bootstrap and the Bayesian models, there were far too many outcomes below the 10th percentile. Figure 1 shows the histogram of percentiles for the Bayesian model.

We should note that this Bayesian model allows for slowly shifting expected loss ratio and calendar year trend parameters. The model fits the training (upper triangle) data very well. We attribute the failure of this model to changes in the insurance environment during subsequent calendar years that were not anticipated in the model.




Okay, so this attempt to predict the distribution of outcomes falls short. As more data comes in, we should expect the predicted outcome, i.e., the mean of the posterior distribution of outcomes, to move closer to the ultimate outcome. The question that is relevant to the time horizon issue is: How much will the loss reserve liability move? If it always moves slowly, the risk may be manageable for a going-concern insurer.

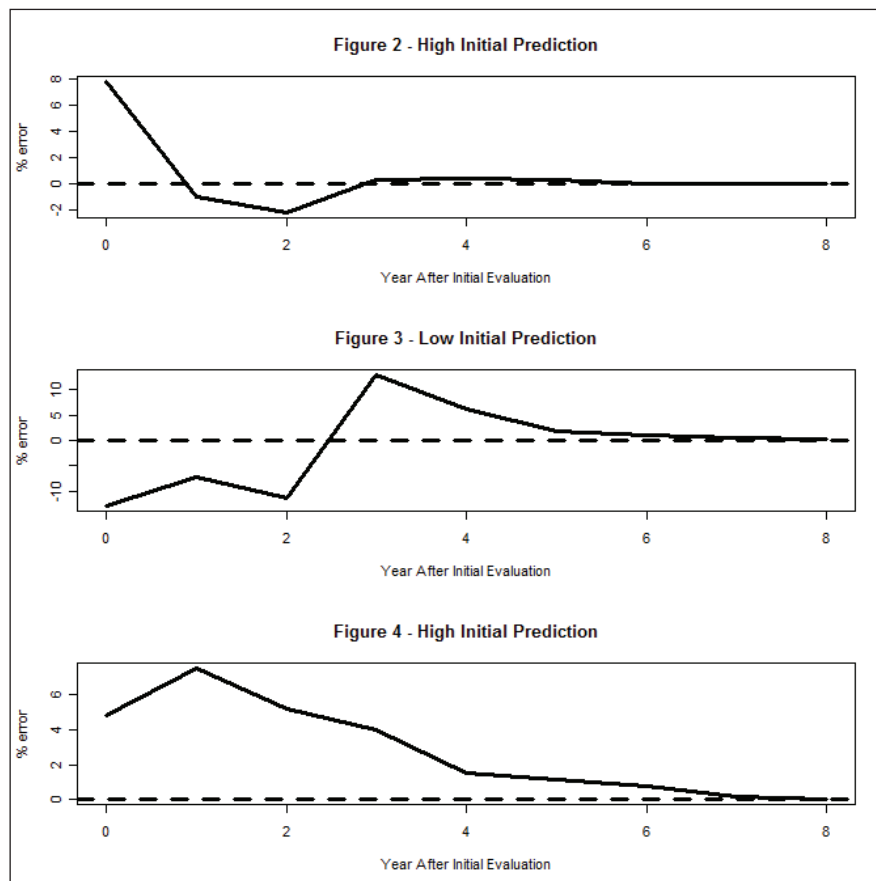
¹ http://www.casact.org/research/index.cfm?fa=loss_reserves_data

The CAS Loss Reserve Database has subsequent payments, and one could use them to see what can happen as additional data come in. I did this for a number of insurers and put the results for three of them in Figures 2, 3, and 4. These figures plot the prediction error as a percentage of the actual ultimate over time. Figures 2 and 3 provide examples showing that a one-year swing in the estimated ultimate loss can be larger than the initial error. The swing in Figure 3 occurs after the one-year time horizon. Figure 4 provides an example where the estimated loss does change slowly over time.

These examples, based on real insurer data, show some of the challenges that we will have to overcome before implementing a risk-based capital formula:

- Why are we considering risk-based capital formulas that depend on high percentiles of the distribution of outcomes if we are unable to reliably predict the percentiles of the outcomes?
- Should we have a one-year time horizon when the year-to-year changes in the indicated reserve are not small relative to the entire risk?

Perhaps these challenges will be met with a better loss reserve model. But I don't think we have it yet. 



Special Interest Seminar to Focus on Cutting Edge Tools for Pricing and Underwriting

Join the CAS on October 3-4, 2011, at the Baltimore Marriott Inner Harbor at Camden Yards, for the seminar “In Focus: Cutting Edge Tools for Pricing and Underwriting.” This seminar will appeal to actuaries at all levels of experience and will address the following areas:

- Usage-Based Insurance
- Demand Modeling and Price Optimization
- Next Generation Predictors
- Analytical Methods
- Economic or Behavioral Considerations
- Professional Standards

Two general sessions headline the educational program.

The session “Implications of Behavioral Economics for Actuarial Science,” will begin with a discussion of the classical economic notions of *homo economicus* and rational expectations. Next, more recent, related notions such as bounded rationality, heuristics and biases, and the “clinical vs. actuarial judgment” school of psychological research will be discussed. Various examples of biased cognition will be described and related to insurance underwriting and purchasing behavior. Actuaries who choose to confront these issues have the opportunity to add a new dimension to their skill sets and distinguish their employers or clients from the competition.

“Price Optimization and Statements of Principles on P&C Ratemaking and Classification” will highlight the wide range of views on how actuaries performing price optimization analyses are complying with the CAS Statement of Principles on Property and Casualty Insurance Ratemaking, the American Academy of Actuaries’ Statement of Principles on Risk Classification (the SOPs), and with the Actuarial Standards Boards Standards of Practice (ASOPs). This general session will address specific components of the SOPs and ASOPs, and the speakers’ views on how price optimization analyses conform to our professional standards.

In addition, about 25 concurrent sessions will be offered. The complete list of sessions is available in the Professional Education section of the CAS Web Site.

The seminar may qualify for up to 12.6 CE Credits for CAS members. Participants should claim credit commensurate with the extent of their participation in the activity.

The seminar fee is \$800 for active candidates, Associates, and Fellows of the Casualty Actuarial Society. Registrations from non-CAS members are welcome and encouraged; the non-member fee is \$1,000.

Registration is open on the CAS Web Site, but don’t delay—registrations received after September 16, 2011, will be subject to a \$100 late fee. [AR](#)

Join Us in Vegas for the 2011 CLRS!

Earn up to 15 continuing education credits and network with other loss reserving professionals at this year’s Casualty Loss Reserve Seminar (CLRS), September 15-16, 2011 at Aria Resort & Casino in Las Vegas.

The CLRS will offer basic and advanced sessions covering a variety of topics and tracks including reinsurance reserving, financial reporting, variability and ranges, international issues, catastrophes and mass torts, professional development, and emerging issues, as well as other areas specific to individual lines of business. Attendees will leave this year’s seminar better able to understand, evaluate, and estimate loss reserves.

Among the many highlights the CLRS has to offer, attendees can:

- Hear keynote speaker Dianna K. Welch discuss the financial impact of the pending U.S. health care reform.
- Choose from over 50 concurrent sessions to attend with tracks including Health Care, Captive/Self Insured, and International Issues.
- Attend the **only** seminar where you can earn up to 15 Continuing Education Credits.
- Observe excellent speakers from international conferences presenting their global perspectives.
- Learn from authors of featured papers from the Loss Simulation Model Call Paper Program.

The CLRS is an opportunity to present and discuss significant

2011 CLRS, page 46

2011 CAS Annual Meeting Heads to Chicago

The insurance underwriting cycle, mergers and acquisitions, the National Flood Insurance Program, and climate change are among the featured topics to be addressed during the CAS Annual Meeting, scheduled for November 6-9, 2011 at the Hyatt Regency in Chicago.

The CAS Annual Meeting is an opportunity for actuaries and other insurance professionals to stay abreast of current issues affecting the actuarial profession, and to interact with other actuaries from around the globe.

Four general sessions headline the program:

- Ways to Anticipate and Benefit from Insurance Cycles
- Current M&A Trends in the Insurance and Reinsurance Industry
- The Great Debate around the National Flood Insurance Program
- The Effects of Climate Change per Degree of Global Temperature Increase and the Impact on Policymakers


The CAS Annual Meeting will also offer over 30 concurrent sessions and interactive roundtable discussions, providing many opportunities for attendees to earn additional continuing education credits.

This year's featured speaker is Anthony Goldbloom, founder and CEO of Kaggle, an online platform for data prediction and

machine-learning competitions. Mr. Goldbloom will speak on the power of competition and its application to the business of analytics and, by extension, actuarial science.

Complementing the educational program are ample networking opportunities. Attendees will enjoy dinner Tuesday evening at the Chicago Museum of Science and Industry (MSI), which offers thousands of interactive exhibits and one-of-a kind, world-class experiences to inspire the inventive genius in everyone. The largest science museum in the Western Hemisphere, MSI with its unique and cutting-edge exhibits has earned a place among the "Top 15 Museums in the World" according to *Life* magazine. A new iconic exhibit, "Science Storms," reveals the extraordinary science behind some of nature's most powerful and compelling phenomena—tornadoes, lightning, fire, tsunamis, and avalanches—and lets guests interact with the phenomena by standing inside a 40-foot tornado, triggering an avalanche, creating a tsunami, and much more.

While in Chicago, members will be able to take advantage of Chicago's restaurants, live music venues, museums, and parks, and the Hyatt Regency is convenient to most of it, located minutes from the Magnificent Mile.

Details and an online registration form are available on the CAS Web Site at www.casact.org. Register today! 

2011 CLRS, From page 46

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.

Attendees will learn in the contemporary and sophisticated surroundings of the Aria Resort & Casino, which has earned a AAA Five Diamond Award. When not learning, attendees can explore one of the top tourist cities in the U.S., which has frequent and convenient flights from most major metropolitan areas.

**Save \$100 on the registration fee
by registering before August 17.
Register online at www.casact.org today!** 

Exhibit at the 2011 CLRS

The CLRS organizers encourage companies to exhibit 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 reserving professional's problems. To learn more about becoming an exhibitor, please contact Megan O'Neill at moneill@casact.org

RPP II: The Risk Premium Project Update

By Martin Eling, University of Ulm, Germany, and Hato Schmeiser, University of St. Gallen, Switzerland

The Risk Premium Project (RPP) represents an extensive analysis of the theory and empirics of risk assessment in property-casualty insurance. The project was initiated by the CAS Committee on Theory of Risk (COTOR) and began in 2000 with RPP I, a review of the actuarial and finance research done to that date. Given the vast development of research both in finance and actuarial science, the aim of RPP II is to extend the findings from RPP I with research done in the last decade. Furthermore, challenges for future research shall be identified. The research on RPP II was undertaken between June and November 2010 and CAS members were involved in the process via an online questionnaire. An invitation to participate in this questionnaire was posted on the CAS Web Site and advertised in the CAS weekly e-bulletin in July 2010. The following article provides some background on the Risk Premium Project and highlights some key results. We also list some references for further information, especially a database at <http://www.casact.org/rpp2/>.

Background and Development of the Risk Premium Project

COTOR initiated the RPP in 1999 with a call for research. During that time the appropriate procedure to account for risk in discounted loss reserves had been the subject of much research and discussion in the actuarial profession. COTOR's intention was to develop a document integrating the various approaches presented in the literature in order to provide guidance for actuaries and regulators. Furthermore, COTOR wanted to advance the state of the art in risk assessment by identifying and working on open empirical research questions on discounting loss reserves.

A first document summarizing the state of research on risk adjustments for discounting liabilities in property-liability insurance was published in 2000 (see Cummins et al., 2000; the RPP I report). This report widened the original focus on risk adjustments for discounting liabilities to encompass other advances in risk assessment and capital allocation techniques. Based upon the findings presented in the report, two empirical research papers were sponsored by COTOR: (1) Cummins and Phillips (2005) analyze the costs of equity capital for insurers by line of insurance; and (2) Cummins, Lin, and Phillips (2009) regress insurance price variables on capital allocations by line,

measures of insurer insolvency risk, and other risk and control variables.

The results of these two empirical studies and other recent articles (see, e.g., Cummins, Derrig, and Phillips, 2007) made it clear that the literature on risk assessment for property-casualty insurance is evolving rapidly. In fact, the modeling and management of risk has seen significant new developments over the last 10 years, with a substantial number of academic research papers published on topics such as risk mitigation, risk and solvency measurement, capital allocation, risk management tools, or valuation techniques. Also noteworthy is the development of behavioral insurance, new valuation techniques (e.g., market-consistent embedded value or MCEV), new regulatory models (e.g., Solvency II, Swiss Solvency Test), and emerging risks analyses, especially in the field of operational risks. Furthermore, enterprise risk management (ERM) and its integrated and holistic view on risk and risk management, has become an accepted and widespread concept in the profession.

Aims of the RPP Update

All these developments motivated COTOR in 2010 to renew its call for research. The goals of the Risk Premium Project Update (RPP II) is thus to revise the findings of the first Risk Premium Project. Specifically, the following three goals were defined by COTOR:

- (1) Update the bibliography from Phase I of RPP I with additional papers and research done since 2000, incorporating literature from reinsurance, risk management, and catastrophe sources.
- (2) Revise key conclusions included in Phase II of RPP I in light of additional literature and the results of the two empirical studies funded by COTOR (Cummins and Phillips, 2005; Cummins, Lin, and Phillips, 2009).
- (3) Recommend additional empirical studies to enhance the understanding of the current theories and to quantify particular aspects, as well as to update and provide alternatives to recent models.

For RPP II it was important to recognize that the literature has seen an impressive increase in the number of topics, papers, and journals. In addition, strategies for conducting literature searches and the means of communication among researchers have completely changed over the last decade. The search and

evaluation strategy used for RPP II incorporates these changes. For example, an online questionnaire to collect feedback on recent developments from interested colleagues in academia and practice was included.

Key Results

The RPP II literature review covers 961 references. The opinions of 51 colleagues from academia and practice were incorporated into the review. Briefly summarizing the main results, we find that actuarial and financial views of how to price risk are still converging but additional factors have been incorporated into the discussion such as new risk measures, new valuation techniques, behavioral aspects, and emerging risks. In the aftermath of the financial crisis, the literature discusses systemic risk, liquidity risks, and implications from the crisis. Throughout RPP II five conclusions from RPP I are revised and five new conclusions are added. Furthermore, five areas for future research are identified.

Revision of key conclusions from RPP I

1. **Financial vs. actuarial approaches:** There is an ongoing consolidation between financial and actuarial literature with regard to pricing insurance contracts, with both fields acknowledging the roles of systematic and non-systematic risk.
2. **Fair value of the insurance premium:** Theoretical models and empirical tests have confirmed that given the real-world market imperfections, the price of insurance should be a function of (1) the expected cash flow with adjustments for systematic risk, (2) production costs (i.e., expenses), (3) default risk, and (4) frictional capital costs. By-line adjustments should be integrated depending on the cash flow pattern of the liabilities.
3. **General finance:** The single beta capital asset pricing model (CAPM) cannot adequately price financial contracts. Asset pricing models were systematically expanded to account for new aspects (e.g., liquidity risk or behavioral aspects). Empirical validation is ongoing. All these aspects are of high relevance for the insurance industry, but have not yet been investigated in an insurance context.
4. **Capital allocation:** Capital allocation is still controversial in the literature. More than 20 new approaches have been

proposed in the recent literature and critically reviewed in light of economic and mathematical principles. Some authors consider the Myers and Read (2001) model as a benchmark, while others believe that it is inaccurate. Capital allocation remains a topic of active discussion in academia and practice.

5. **Risk transfer:** Numerous papers have theoretically and empirically confirmed the assertion that default risk is recognized in pricing risk transfer to the policyholder.

Extension of key conclusions from RPP I

6. **Use of market-consistent valuation techniques:** Practitioners are increasingly using market-consistent valuation techniques, for example, in the context of regulation (Solvency II, Swiss Solvency Test) and public disclosure (International Finance Reporting Standards, Market-Consistent Embedded Value). The new valuation techniques reflect the theoretical conclusions on the price of insurance (see conclusion 2).
7. **Increasing importance of ERM involving classical techniques as well as new product categories:** Market-consistent valuation reveals the volatility of the insurer's business model and calls for holistic risk management. In this context we see an increasing role of both classical risk management techniques (e.g., risk mitigation) as well as new means (e.g., reinsurance and alternative risk transfer) to manage risk in a world of market-consistent values.
8. **New risk measures and new risk categories:** The last decade has seen the success story of quantile-based risk measures (value at risk, expected shortfall) and generalizations of these (spectral, distortion). New risk categories (operational risk, systemic risk) have been introduced in academic literature and their limitations are discussed.
9. **Emergence of behavioral insurance:** First steps have been taken towards behavioral insurance, a new area of literature that may bridge the gap between the theoretical models and real-world outcomes. Many researchers have discussed default risk and complement findings of theoretical models.

10. Reinsurance and alternative risk transfer: The convergence of (re-) insurance and capital markets through alternative risk transfer (ART) has been one of the most important economic developments of the past decade. The market for ART is, however, still below the expected capacity and has suffered several setbacks. Recent literature has analyzed the reasons for market failures (e.g., diversification trap) and alternative product innovations (e.g., hybrid catastrophe bonds) to increase volume of the ART market.

Five areas for future research

1. **Pricing and cost of capital:** Classical CAPM is insufficient to estimate costs of capital; Fama/French and Rubinstein-Leland are better models for this purpose. However, more research has been done on financial economics in recent years, with unclear implications for pricing of insurance. Are there other factors that we need to take into consideration, such as liquidity, credit, and operational risks, or behavioral aspects, such as time varying risk aversion? A systematic analysis of asset pricing theories in an insurance context could thus constitute a major empirical research agenda.
2. **Capital allocation:** Dozens of capital allocation approaches are discussed in various literatures and adding another one will be of very limited value. It might be more helpful to empirically validate the usefulness of different capital allocation approaches. Some authors see the Myers and Read (2001) approach as a best practice; others think that this model is inaccurate. Which model is the best one?
3. **ERM, modeling of risk, and dependencies:** Several empirical questions surrounding ERM need to be answered. First, the value added by ERM is an empirical but still unanswered question. Second, there are many models for the depiction of dependencies, but no empirical evidence for their validity. Third, the robustness of risk measures should be tackled empirically. Finally, the consistency in risk management must be addressed.
4. **Financial crisis and systemic risk:** The recent financial crisis has raised important questions. Do regulations accelerate a crisis? What is the role of insurers in the highly connected financial services industry? Is an insurance run possible or not?
5. **Analysis of new insurance markets and products:** In theory the market for ART products should have a huge potential, but in reality the market for ART is rather small. How can we eliminate the market failure in ART? What is


the capacity of the ART market? Finally, emerging insurance markets are future growth markets, but we still do not know enough about insurance business in these markets.

A searchable Web page with all review results is provided at www.casact.org/rpp2. The Web page is structured along four categories (About RPP II; Questionnaire; RPP II Results; RPP II Database) and contains most of the results presented in this document. The central element is the searchable RPP II database with 961 references and all future research topics that might encourage future research on risk assessment for property-casualty insurers. The selection of thematic categories and literature is subjective, but by incorporating the opinions of interested colleagues from academia and practice, we hope to make the survey as objective as possible.

For further details also refer to the RPP II report, a 58-page pdf with detailed analysis of the conclusions and future research areas as outlined above (also available at www.casact.org/rpp2).

We hope that the results encourage future research on the theory and empirics of property-casualty insurance. We also would like to thank the CAS members for their active participation in the online questionnaire that helped improve the results. Furthermore, we are grateful to all COTOR members, especially Richard Derrig, for their valuable input and comments.

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Translation, Please! Being Conversant in Marketing and Underwriting Land

Many times in the program business arena, there can be a disconnect between an actuary and an underwriter or marketer when it comes to deciding on a loss pick for a particular account.

This quarter's column is intended to serve as a helpful guide to understanding the nuanced language and intuition of an underwriter or marketer. The handy table and phrase book below will help actuaries quantify those subjective attributes that can influence the ultimate profitability of an account.

Let's start with a simple table quantifying various credits that can be applied to an initially unprofitable loss pick at the request of a marketer leveraging his or her intimate knowledge of an account.

<u>Account attribute or marketer's inside knowledge</u>	<u>Credit</u>
The gut-feeling-that-we're-going-to-make-money-on-this-account credit:	-7.0%
"I've known these guys for 12 years" discount:	-12.0%
Promise that the bad winter weather will never occur ever, ever again:	-5.0%
The "They're good people" discount:	-10.0%
Credit due to being forced to talk on phone six times with owner's son:	-6.0%
ULAE? We don't need no stinkin' ULAE! Their losses must've included ULAE!	-3.5%
Last-minute data submission mitigating some of the poor loss experience:	-9.0%
The "Check your numbers again" discount:	-4.0%
We're-going-to-write-this-deal-anyway-so-let's-make-it-look-good credit:	-8.0%
The "We're so close now, just give me the last few points" discount:	-7.0%

Now here is a simple, common phrase book to help understand what an underwriter is really saying.

What they say:

Is this your loss pick?

How did you come up with this?

Did you use industry factors to develop this?

Did you consider their good loss experience in 1967?

How did you credibility-weight this?

Well, I don't think this is going to fly.

How do you propose we proceed/move forward/get this done?

What they mean:

It's too high.

It's way too high.


You must be high.

Speaking of high. . . .

I know where you park.

Your car is currently on fire.

I want to break/kick/smash your computer.

Communication is the key to a good working relationship with any underwriter or marketer. I hope the above guide will help open these channels and ultimately lead to a better, kinder world filled with profitable loss picks. 



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IN MEMORIAM

Yves Provencher
(ACAS 1993) 1957-2011
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