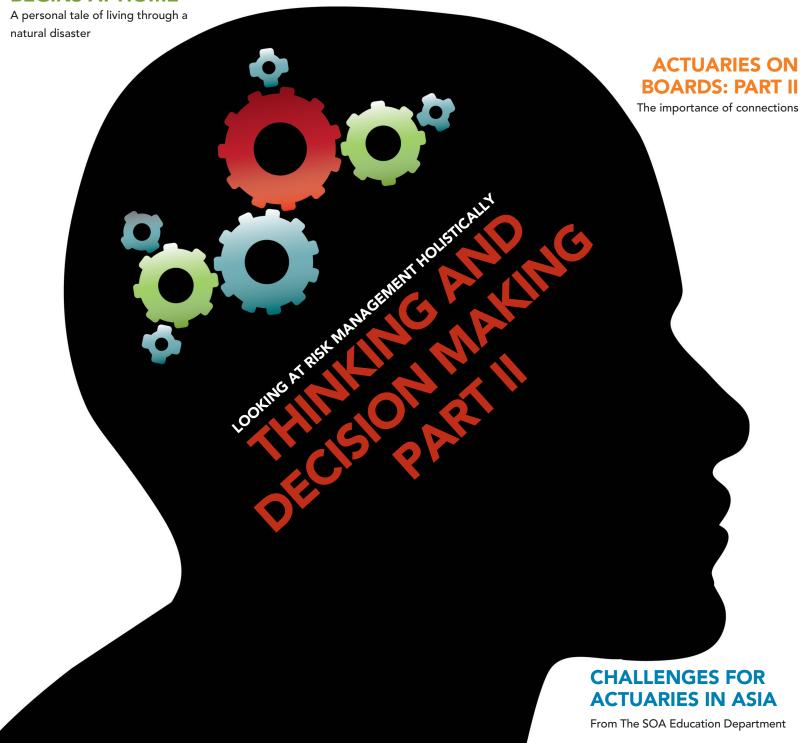
ACTUAL APRIL/MAY 2012 VOLUME 9 ISSUE 2

RISK MANAGEMENT BEGINS AT HOME





Plan to attend the 2012 Health Meeting. We're heading to the Big Easy—and planning more topical sessions to provide you with the latest updates on important health issues. Expect top-notch speakers (Tom Davenport and Mary Milla) and numerous of networking events—and the opportunity to earn lots of CPD credit. There'll be plenty to see and do in New Orleans while you're there: Chill out in a blues or jazz club; check out the city's well-known architecture; take a riverboat tour or carriage ride; or—head to the outskirts to see sprawling plantations and the incredible wildlife.

http://HealthSpringMeeting.soa.org.



Here's what last year's attendees had to say:

"Thought provoking and extremely worthwhile." "Gained great industry insight!"

"Excellent content and thoughtful delivery." "Ample opportunities to earn professionalism credit."

"Sessions were great! Loved the smaller groups and wide range of topics!"

April/Ma

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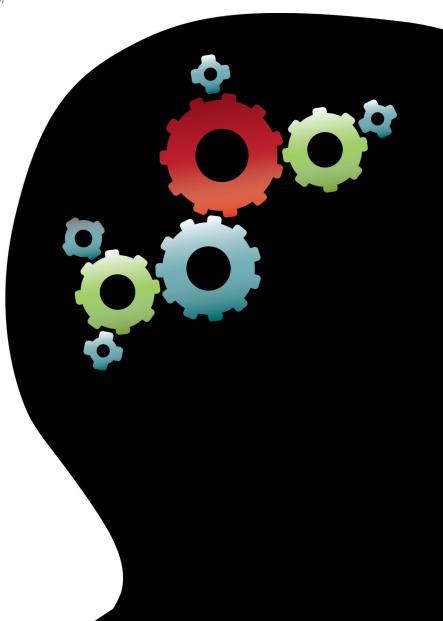
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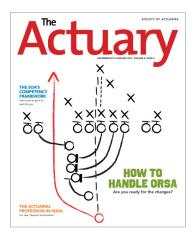
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Letters To The Editor

SOCIAL SECURITY AND LTCI



DEAR EDITOR,

IN THE DECEMBER 2011/JANUARY **2012 ISSUE**, *The Actuary* presents SOA President Bradley M. Smith's speech at the SOA Annual Meeting held in October 2011.

Smith articulated five societal problems involving substantial actuarial considerations. I will comment further on one of those, i.e., the problem of Social Security.

Smith used politically proper terminology when he stated as follows:

"... tax revenue in excess of benefit payments accumulated in the Social Security Trust Fund. The federal government borrowed this excess revenue to pay current expenses."

He noted that the actuarial profession needs to support efforts to better educate the tax-paying public and lawmakers about the Social Security funding problem. I believe he meant we should do this more profoundly than by crunching numbers when asked.

I agree wholeheartedly and am writing to suggest some specifics.

Much of our citizenry is badly misinformed about the Social Security Trust Fund. Following are some explanatory efforts I have used in my economics classes:

1) The Social Security Trust Fund is a myth. The propagated value of the Trust Fund, currently in excess of \$2 trillion, is what WOULD be in the Trust Fund IF the government had been putting revenue into the fund and paying expenses out of it. In reality, our government spends (and always has spent) all tax receipts regardless of their nature, and supplements that with borrowing, in order to meet its obligations.

- 2) Your grandmother opens a college savings account for you and funds it in an actuarially determined way. Each month she kindly shows you the documentation of the account. You feel assured. But one day she says to you that she has taken all money out of the account and used it to pay for an elaborate cruise. She still plans to pay for your college education, but how much assurance do you have now?
- 3) Bernard Madoff was half correct when, from prison, he labeled the Social Security system a Ponzi scheme. The two basic elements of a Ponzi scheme are that new money pays old, and that old money is not in trust because the operator has already taken it.

Of course, the actuarial profession can do much more than explain the non-existence of the Trust Fund. Actuaries are well-positioned, perhaps uniquely positioned, because of our training in the diverse areas of demographics, projection of contingent financial obligations, discounting, and cash flow comparison.

Actuaries could advise politicians, as well as the public in general, perhaps as follows:

- 1) The size of the mythical Trust Fund (as well as the year that it "goes broke") should be irrelevant to decision making. Actuaries can critique a statement such as "Social Security is sound for the next 40 years" when it means only that the Trust Fund drops to zero at the end of that time.
- 2) Calculating the size of the Trust Fund is a waste of time. Similarly, including the amount the government owes the Trust Fund in the official tally of the national debt, while a nice attempt to "own up" to having spent the money, is misleading.
- 3) Current law precludes payment of any benefits beyond the amount that can be financed by the Trust Fund. Actuaries should argue for the repeal of this law because it imbues a meaningless number, i.e., the size of the Trust Fund, with a tremendous amount of leverage. Wasteful political bickering will result from this law.

4) The funding problem will continue to worsen from the scissors effect of longer lives and lower birth rates. Two defenses we have are productivity and immigration (the demographic benefits of immigration are poorly understood and actuaries could assist tremendously).

Actuaries are well-positioned to go even further. Taxation provides the cash flow to match against the obligation, so actuaries should be involved in tax policy. Here are two thoughts wherein actuaries might concur (or not, if it comes to that) and might proceed from:

1) Social Security and Medicare (also in Smith's list of five societal problems) should be aggregated for purposes of funding-related legislation. The political process will be streamlined if one debate, instead of two, is the result. Also the payroll tax system would be simplified if these two were unified.

2) A debate could be introduced as to whether the payroll tax system should be combined into the personal and corporate tax systems. The logic of separate payroll taxes is strained when the proceeds are spent rather than used to fund the programs for which they were designed. A

Douglas A. Eckley, FSA, MAAA

Professor of Economics Northern Virginia Community College

DEAR EDITOR,

CORIN CHAPMAN'S DECEMBER/JANUARY EDITORIAL, presented as a plea for reasonableness in the regulation of long-term care insurance, raises issues that go beyond regulatory policy and beyond the LTC line. These issues could, and should, fill the programs of actuarial meetings for years, and the editorial deserves to be a case study for seminars in many disciplines. Here are some questions that jump out at me:

- If limits on premium increases contribute to less efficient insurers leaving the market, is competition reduced or stimulated?
- · Why should insurers be allowed to avoid the cost of significant pricing errors through premium increases? In no other business can underestimated costs be shifted to past purchasers.
- Do insurers bear particular responsibility for pricing and disclosure in an immature market with scant credible experience?
- · A very long-term policy dependent on lapse-supported premiums in effect contains an embedded tontine. What ethical hurdles exist? What disclosure to prospects is appropriate?
- What is the optimum investment strategy for LTC? To the extent that LTC insurers could have protected investment returns via derivatives but failed to do so, should regulators allow shortfalls to be borne by policyholders?
- What is the appropriate place of non-forfeiture values (e.g., paid-up insurance) in LTC policies?
- · Can risks be equitably shared with insureds through participating LTC policies?

• Should Medicaid's role as a de facto LTC insurer be reduced? Formalized? Expanded? Can the future cost of this commitment be better communicated to the public?

An overarching question, if we are indeed a profession, is: How does the actuary balance professional responsibilities to an insurer employer or client, the insureds, and the public at large?

Frank E. Finkenberg, FSA, retired

DEAR MR. FINKENBERG,

I appreciate your response and agree that perhaps my article raises more questions than provides actual answers. As you point out, the issue basically boils down to responsibility. Within an insurance contract, I believe there are embedded shared risks by both the insurer and the insureds, particularly with longer term products. Shifting all those responsibilities to the insurer or to the insured would make the product either unsustainable or unmarketable. As actuaries, we are forced to take a primary role in building a product that is beneficial for all parties involved, which consequently obliges us to begin debating many of the questions that you have presented. Only by understanding the points of view of all parties involved can we have a rational and reasonable discussion about these complex issues. Therefore, a thank you goes out to those, like yourself, who continue to motivate the conversation as each question raised hopefully generates an answer that builds a stronger and more beneficial insurance industry.

Corin Chapman, FSA, MAAA

Actuarial Analyst, State Farm Life Insurance Co.

Editorial

ACHIEVING ACTUARIAL QUALITY

BY TOM PHILLIPS

EVERY ACTUARY IS AWARE OF THE STANDARDS that guide our profession. Chief among these, for Academy members, are the Code of Professional Conduct, the actuarial standards of practice, and the Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States. There is no need to elaborate on what these mean for actuaries; to borrow a phrase from the Code, these set "forth what it means for an actuary to act as a professional."

It is easy to think of these standards as compliance items. The actuary, acting as a professional, looks to the standard and notes that the services performed are consistent with the guidance in the standards.

There is another side to compliance with existing actuarial standards: in complying with professional standards, the actuary provides actuarial services at a quality level expected of the profession. In one sense, it states the same concept. However, complying with actuarial standards might convey "minimum standards" and "doing what is expected of actuaries." Providing quality actuarial services includes that, but can also mean providing appropriate and

robust actuarial services that meet the needs of our employers and clients.

It is probably safe to say that every employer of actuaries and user of actuarial services believes that the actuary should comply with actuarial standards and provide services at a quality level defined in industry standards. Beyond that, an employer of actuaries may decide to define the expected level of quality in the actuarial services to be provided by the actuaries of the firm; that is, an internal quality framework.

This article describes considerations for the development of a framework designed to promote actuarial services at a quality level meeting the needs of an insurance organization; it is meant to provoke thought among actuaries with respect to projecting a positive image of actuaries in performing quality actuarial services.

For the past three years, I've had the leadership role in developing, maintaining and promoting an actuarial quality framework. I'm indebted to others for much of the thought and design that went into the framework. I will explain some of that

thought and design information, highlighting issues with how we've addressed them.

The basis for building a company quality framework is the commitment of both actuarial leadership and corporate leadership. The chief actuary and the chief risk officer are key participants; they need to provide a steady level of support for both the development of a quality framework and the encouragement of the actuarial community to follow the developed framework. Equally important, the actuaries in leadership positions companywide need to support and promote the process.

The simplest starting point for a framework for quality actuarial work needs to address the structure of the framework. We chose to build the structure in four areas:

1) Developing corporate-wide internal standards, based on the actuarial standards of practice.

The actuarial standards are the starting point, but an actuarial quality framework may consider (1) setting a higher bar for certain services, and (2) providing more detail than found in certain areas of the professional

standards. In this area, the approach we adopted was to define "actuarial guidelines" to supplement the standards of practice. For example, in pricing, the guidelines note that the pricing actuary should not only perform sensitivity tests of key assumptions (similar to ASOP #7), but the actuary should also use sensitivity testing to determine whether the product contains an "unacceptable level of risk." Other guidelines cover spreadsheets and models, promoting documentation and peer review.

2) Actuaries in different business areas should manage their own actuarial services.

The actuarial organization of any large company can be guided by the chief actuary, but much responsibility for quality actuarial services must be managed by the actuaries within the different business areas. Many actuarial services performed are unique to their business areas. Thus, while corporate level guidelines for actuarial services provide some standardization, business area practices required a "bottom-up" approach, in addition. Recognizing this, one practical approach is for the actuaries within the business areas to set their own policies that define expectations of quality actuarial services with that area. Our quality framework followed that approach and actuaries in the business areas have developed their own policies with respect to pricing, valuation and documentation.

3) Reviewing actuarial work with respect to the framework.

To make a quality framework real to the actuarial community, a review of actuarial services is important. This is likely to be the most challenging area of a framework.

The review of actuarial work should focus on compliance with the defined internal actuarial framework and not the decisions and judgments of the actuary whose work is being reviewed. The goal is to have a framework that is effective in the company environment. To emphasize the importance of reviews, summary reports on compliance with the framework should be delivered to senior levels of management.

Our framework provides for a regular review of actuarial services provided by all business units, on a rotating basis. This review process generally involves selecting a specific, major actuarial project in a given business area and doing an intense review of the project for consistency with the quality framework.

But an actuarial review should go beyond enforcing the "rules" of the structure. It should also provide feedback and improvements to actuarial processes around the entire organization. Over time, the reviewing actuary sees effective actuarial methodology across the organization and can provide constructive suggestions for better ways to provide services.

4) Education.

Actuarial education and actuarial standards need to be promoted hand-in-hand with the development of a framework for actuarial quality. This can include active promotion of appropriate industry meeting and webcast attendance. In addition, internal educational sessions, both formal and informal, are a good way to keep actuaries current on educational topics. Informal sessions may aim at interactive meetings on topics; the formal sessions make presentations. One way to promote professionalism is to discuss

and respond to new and revised ASOPs.

A framework is a balancing act. It needs to be strong enough



Tom Phillips

that actuarial services can be reviewed and improved where deficient. On the other side of the issue, it would be easy to be overly prescriptive and to create a burdensome checklist for all actuarial services. For a process that is based very much on the cooperation and goodwill of the actuaries located in the lines of business. an overly prescriptive framework would meet resistance and would be unsuccessful.

None of this can be successful without a commitment from the community as a whole. Success with business unit leaders is usually based on the right level of guidance, requirements and support. Success with the entire actuarial community is based on the idea that the framework is a cooperative effort to improve the quality of actuarial work and the status of the actuarial community within the organization.

Going forward, maintenance of a framework will be a dynamic process. New areas are being added to actuarial practice, and general actuarial practice is more complicated. Actuarial standards themselves continue to evolve. The future challenge of any framework for actuarial quality is to be flexible enough to keep up with the changes in actuarial practice.

Tom Phillips, FSA, MAAA, is senior actuary with The Principal Financial Group. He can be contacted at phillips.tom@principal.com.

Interested in volunteering at the SOA? Visit www.soa.org/volunteer to learn more.

Letter From The President

BECOMING THE LEADING GLOBAL PROVIDER OF ACTUARIAL EDUCATION

BY BRADLEY M. SMITH

ONE OF THE MANY BENEFITS of both my commercial responsibilities at Milliman and my service as president of the Society of Actuaries is that I am able to travel extensively throughout the world. Recently I had the privilege of attending the Global Actuarial Conference in Mumbai, an extremely well-run and productive event. On the same trip I visited Riyadh, Saudi Arabia where Greg Heidrich, executive director of the SOA, Ken Guthrie, the SOA's managing director of education, and I visited with Mohammad Alshayea, director of Insurance Supervision of the Saudi Arabia Monitory Authority (SAMA) and his staff. SAMA is responsible for the regulation and oversight of the insurance and banking sector in Saudi Arabia. The insurance industry there has grown substantially in recent years and is expected to continue to grow for the foreseeable future. Consequently, SAMA's director is interested in developing a robust actuarial profession in Saudi Arabia. It is virtually nonexistent today. The discussion was very beneficial and we expect to continue to explore how the SOA can assist SAMA with the development of the actuarial profession there.

In our discussions, Mr. Alshayea stated that the insurance industry in Saudi Arabia is currently dominated by health and casualty coverages, representing more than 90 percent of premium revenue. This fact is very consistent with other developing countries where non-life coverages are the first to emerge as the citizenry enters the middle class. This is certainly the case in China where the sale of automobiles to the emerging middle class is exploding. The same is true in India. Consequently, the demand for actuarial talent in developing countries is initially focused on propertycasualty insurance as other business lines like life and health insurance often follow by a few years. While this isn't a revelation by any stretch, this reality and the rapid changes in globalization we have experienced over the past 10 to 15 years offers significant and exciting opportunities for the SOA.

At its March board meeting, the SOA board reviewed preliminary work to revise its current 2008 - 2012 strategic plan. One of the plan's stated objectives is for the SOA, as the world's largest actuarial professional organization, to become the leading global provider of

actuarial education. Achieving this goal will be extremely difficult, if not impossible, if the SOA fails to provide education for all disciplines of actuarial science. The SOA is currently the only broad-based actuarial organization with a significant international presence that does not offer education in the full range of practice areas to achieve fellowship, leaving general insurance (property-casualty) related education to other actuarial organizations like the Casualty Actuarial Society (CAS), The Institute and Faculty of Actuaries in the United Kingdom, and The Institute of Actuaries of Australia. This void in the SOA curriculum is one of the primary motivating factors for inviting the U.S.-based professional actuarial associations to consider consolidation. Since I raised the concept of exploring consolidation last October, the CAS has made it clear on several occasions that it values its independence and has no interest in pursuing consolidation. It is apparent that, if the SOA is to meet its strategic objective of being the leading global provider of actuarial education, it must offer general insurance-specific education and examination to meet the needs of our growing member and candidate base outside of the United States and Canada in service to developing economies.

Given this consideration to remain a key global player, the Board approved the creation of this new track after determining that including general insurance education will help fulfill this strategic vision. The first of the general insurance track-specific exams and e-learning modules is expected to be made available to candidates beginning with the fall 2013 exams. This exciting news was shared in an announcement sent to all members and active pre-ASA candidates who have taken exams or modules in the last two years.

In one way, this was an easy decision. The SOA couldn't meet its strategic objective if it did not offer a general insurance related curriculum. However, our relationship with the CAS is longstanding, one that has been beneficial to both organizations. In reality (and by law) we have always been friendly competitors, prompting some comments sent to the membercomms@soa.org email box to express concern at the idea of a more distinctly competitive relationship. Count me as one who falls in this camp. We have a long history of working together on a number of joint activities and look forward to continuing to collaborate with the CAS now and in the future. However, given the incredible growth in the demand for actuarial capabilities globally, this business decision is important to the SOA's future for our members and our candidates.

Organizations across the globe are facing risk management challenges that cross multiple disciplines and many of these organizations with international presence employ actuaries or use our consulting services. It is incumbent upon us to ensure we are equipping the actuaries of today-and tomorrow-with the knowledge and skills to address a full spectrum of risk management issues. Serving employers of our candidates, aligning our credentials and education system with the way businesses structure their risk management operations is the right thing to do. Ultimately, the SOA's creation of the general insurance track to fellowship offers employers a single, global source for the full range of actuarial talent and credentials they need and helps to broaden the knowledge set for all SOA members.

Are there risks involved for the SOA? Certainly. There is much to do in a relatively short period of time. There will be additional investment (losses) in the development of this capability, as the demand for SOA-provided general insurance education and examination related services ramps up. However, the bigger

risk is to not pursue this opportunity.

Consequently, this is a threshold issue for Bradley M. Smith the SOA. I have served on the board in leadership positions at the SOA for seven years over a 16-year period. This is by far the most strategic issue I have faced as a board member. I hope you will support this initiative to help assure its ultimate success.

The SOA will be hiring an actuary with expertise in general insurance and forming volunteer committees to be involved with the development of the curriculum and exams. If you are interested in contributing your expertise as a volunteer, I encourage you to contact Stuart Klugman, FSA, staff fellow-Education, at sklugman@soa.org.

We have already received thoughtful and wide-ranging feedback from members, candidates and employers. If you have not shared your comments and wish to do so, write to membercomms@soa.org or post a comment on the SOA blog.

Thank you for your support.

Bradley M. Smith, FSA, MAAA, is president of the Society of Actuaries. He can be contacted at bsmith@soa.org.

The Entire Actuarial Tool Kit BY JIM MANGE

OMETIME AFTER LANDING my first full-time actuarial position at a life insurance company, I was visiting my mother. She set her automobile insurance policy down in front of me. "You're an actuary," she said. "Explain this to me."

Our raison d'être—the public—cares not whether we are life actuaries, health actuaries or general insurance actuaries; we are actuaries. In these financially-troubled times, we do ourselves and the public a grave disservice if we do not leverage all the tools available for managing risk. That means

educating our candidates and members about the entire actuarial tool kit, not just the tools of life and health actuaries.

But given our heritage, are we-the Society of Actuariesready to do that? In some ways, we already are. Exam C, one of our preliminary exams, prepares our candidates with many of the tools they would need to practice as general insurance actuaries. From its beginning in February 2006, the Fundamentals of Actuarial Practice (FAP) e-Learning course has offered basic education in general insurance pricing and

CONTINUED ON PAGE 40

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NECTED

HE ACTUARIES ON BOARDS SERIES



THIS ARTICLE DISCUSSES THE ADVANTAGES OF BEING WELL-CONNECTED WHEN SEEKING A BOARD POSITION. BY SARAH J. HAMBLIN AND MEMBERS OF THE SOA'S **ACTUARIES ON BOARDS TASK FORCE**

S IS SO OFTEN THE CASE IN LIFE, being invited to become a member of a corporate board of directors is just as much about who you know as it is about the skills you bring to the table and what you can offer the company as a whole. You can bait your hook with all sorts of actuarial know-how that would be useful to any company—the ability to manage risk or advise on executive compensation, wizard-like math skills, a winning personality but unless you actually throw your line in the water, you are unlikely to get any bites.

Now that the government, media and other stakeholders are calling for stronger, more independent boards in the wake of the financial crisis and new financial regulations, actuaries may be more useful than ever in board positions. To this end, the Society of Actuaries

(SOA) has formed the Actuaries On Boards (AOB) Task Force in order to research the best ways for actuaries to pursue this career path. Recently the task force interviewed more than 15 actuaries currently working as sitting members of various boards in the hopes of gathering advice for those who might someday consider seeking such a position. This is the second in a series of articles in which the information gleaned from those interviews will be presented.

MAKING CONNECTIONS

Even if serving on a corporate board is more of a long-term goal rather than an immediate course of action, networking and building relationships with those who are already members of a board is a good step in the right direction.

"If you want to be on a board you have to know the right people," said Claude Lamoureux, FSA, FCIA, former president and CEO of the Ontario Teachers' Pension Plan. "Your Rolodex is very important and you have to influence the head hunter. It's a never-ending quest."

Lamoureux, who chairs both the nominating committee of the Public Sector Pension Investment Board and The Learning Partnership, said there are many different ways to get your name out there. "You have to meet the right people. You have to make speeches. You have to write small papers. There are so many good opportunities. When you look at it even on the political side, how people mismanage numbers and how people misrepresent numbers, it's amazing. Actuaries could certainly write short pieces on that and eventually somebody would say, 'Hey, this person is raising good issues here."

Being an active part of the community is another good way to bring attention to oneself according to Dan Neary, FSA, MAAA, who has acted as chairman of the board and CEO of Mutual of Omaha, as well as a member of the board of directors of Valmont Industries. "When you are serving on not-for-profit boards, heading capital campaigns and being a part of the community at large, people get to be familiar with your approach to things and the way you think," he said. "I think that was probably largely where my first exposure came."

For Marla Glabe, FSA, her first position on a board was admittedly thanks to a business con-

Connect and Network

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Connect with peers, enhance your profile—join an SOA professional interest section at soa.org/sections.

Network with other actuarial professionals—join the SOA LinkedIn group at www.LinkedIn.com.

Leaders are well-rounded: Find your areas for growth by using the SOA Competency Framework Tool at **CFAT.soa.org.**



CTUARIES ON BOARDS

nection. Glabe currently serves on the boards of Wintrust Wealth Management, First Insurance Funding Corporation and Northwest Community Healthcare. She is also president of the North Shore United Way board of direc-

"Being an actuary was not the reason I was placed on the Wintrust board," she said. "It was really more my business acumen; the fact that I had connections, quite honestly, with one of the co-chairmen of a bank that Wintrust Wealth Management does a lot of business with. That made a difference."

Glabe said the fact that she was familiar with the company prior to joining the board helped her feel more comfortable in the position. "One of the things I wanted to make sure of was that I was becoming a part of a company that I would trust the management," she said. "I'm familiar, of course, with the parent company Wintrust, so I knew there was a solid company, but I still wanted to make sure the subsidiaries were also on solid footing and had good strategic focus."

REACHING OUT

When seeking a board position, being shy is not an option. It is important to make intentions known and reach out to people directly. Monica Hainer, FSA, FCIA, MAAA, CEO of London Life Reinsurance Company and a member of several subsidiary boards, said it is common sense more than anything else.

"You can hardly take out an ad in the Wall Street Journal and say, 'Gee, I want to be on boards. Please think of me," she said. "I mean, that's not going to get you anywhere other than probably some bad phone calls back. You should reach out to someone you know that could put you

in touch with someone who was on the board and then go from there."

Dale Wolf, FSA, president and CEO of Jessamine Healthcare, said there is no set formula to obtaining board membership. He has been a member of several boards, including serving on the board of Catalyst Health Solutions Inc. He was also a member of the Covpeople and say, 'I'm very interested in serving on a board. I see your name on boards and I'd be interested in chatting with you about it," Hainer said. "I think a personal approach just works pretty well in most things. It seems the most direct and easiest to me."

Glabe suggested putting together a list of targeted companies and going from there.

WHEN SEEKING A BOARD POSITION, BEING SHY IS NOT AN OPTION.

entry board of directors when he was CEO of that company. "It's a lot more arts than science in terms of making that happen," he said. "Depending on who you talk to, they would tell you that the real answer is to go to the major search firms and work the board consultant, the board search organizations and those firms. Other people would tell you that investment bankers can be helpful. Other people would tell you it's just sort of the old boy's word-of-mouth club network."

GETTING STARTED

Hainer said your own department may be the best place to begin. "You start with your chief actuary and say, 'I want to develop this. I'm interested. Can you point me in the right direction?' And then maybe he or she would introduce you to one of the board members and then you have a conversation with them and they might be your access to get an interview with some real board that needs someone from the outside."

Presenting at a board meeting may also be an opportunity to make connections. "Assuming whoever asked you to be there gave you their blessing, then you could approach these

"See who's on those boards and then see if someone in your network knows one of those board members and get connected that way," she said. "Because you don't really get on a board through the company, per se, you get on the board through the board committee members. You can work also with recruiters, but the recruiters tend to first go to board members and say, 'Who do you recommend?'"

be willing to act as mentors. Lamoureux said he has acted in this capacity before. "There are some great people at Teachers, so I've not been afraid to try to get them involved in different thingsgiving speeches, you know, exposing them," he said. "You learn a lot by talking with people who have

Current sitting board members may even

experience and who have faced tough situations."

WORD OF MOUTH

Once a person's name is out there, the grapevine takes over and things have a way of working themselves out according to Neary. "Gener-

ACTUARIES ON BOARDS

ally speaking, if people are networking and they're keeping their eyes open, word will get out," he said. "I mean, I get called a fair amount from people saying, 'I understand you worked with this individual,' or 'You've served on a board with this individual in the past, can you tell me about him?"

Neary said this word of mouth method of searching for new board members helps ensure that the chosen candidate will fit in nicely with the group as a whole. "It is a heck of a lot more comfortable if somebody on the board has had a prior relationship with the individual, to talk to the way their mind works and the style with which they carry themselves, than it is to blindly choose somebody from a resume,"he said. "Most boards want to take their responsibilities seriously, but they want it to be a pretty collegial environment and want to be treated with dignity and trust by other board members. If you have somebody whose style is very self-serving in its manner, it can be a very disruptive environment."

GETTING EDUCATED

Another way to network while also learning more about corporate governance is to attend classes on the subject. The Institute of Corporate Directors, a Canadian organization, currently offers such classes in Toronto, Montreal, Calgary and Vancouver. Jean-Pierre Provencher, FSA, FCIA, former chairman of the board and CEO of AON Consulting Inc., current director at Blue Cross Life Insurance Company of Canada, attended the course and said he found it quite useful.

"The course covers different aspects of what a potential board member should be aware of and so it'll deal with legislation and fiduciary duties," he said. "It will deal with audit committees and responsibilities, mergers and acquisition, pension and compensation. All of these general topics that you hear about or you're likely to hear about when you're sitting on a board or different committees."

Provencher said he recommends the course because "it gives you a broader outlook and is very focused on board work. You're typically part of a group of 25 to 30 people, so there is a group of people that provoke a lot of exchanges and provide great opportunities for networking in the future."

There are also similar opportunities in the United States. Wolf is a member of the National Association of Corporate Directors and said there is a myriad of educational programs and information available through that organization. "More than one human could ever participate in," he said. "And, of course, a whole variety of law firms will do all kinds of board education, best practices kinds of things."

Wolf said in many cases sitting board members themselves will attend sessions to brush up on their knowledge."I would say my reaction to those programs was that they made board members feel better," he said, "In most cases it wasn't a whole lot of new information being imparted, but rather a confirmation of what best practices were and making sure the things they understood from their past experiences were still applicable. It's just a question of staying current on changing best practices and law and regulations.

EXPERIENCE MATTERS

Ultimately, all of the connections and education in the world will not matter without the experience, personality and history of excellence that make a person an attractive candidate for board membership. Luckily this is all second nature to many talented, seasoned actuaries. "The grounding of actuarial training combined with the broadened business leadership experience that's outside of the pure actuarial field is the perfect combination if somebody's got it," Wolf said. "People who've done just that and who can speak very eloquently to issues of strategy or executive compensation or risk management, that is what boards and particularly public companies are all about."

Next article: Personality traits which lend themselves to board membership and how actuaries may better fit the mold.

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CONTINUING THE SERIES ON THINKING AND DECISION MAKING THAT BEGAN IN THE FEBRUARY/MARCH 2012 ISSUE OF THE ACTUARY WITH, "THE EVOLUTION OF THINKING," THIS ARTICLE EXPLORES LOOKING AT RISK MANAGEMENT HOLISTICALLY, BY NEIL CANTLE

HEN FACED WITH A WALL OF COMPLEXITY, most people have been taught to immediately seek to break the problem into more digestible pieces, study them and then reaggregate to understand the "whole." This approach actually works pretty well if the situation does not change too frequently. Generations of practitioners studying the problem will find increasingly better ways of breaking it up, and reaggregating the solution. But what if things are frequently changing and adapting? In this case the collaboration over time no longer yields the improving accuracy you would hope for.

The reductionist approach is so ingrained in our training that the idea of looking at the full holistic picture as a first step nearly always sounds like a daunting and fruitless route to take. As it happens, this is exactly what we need to do.



MORE THAN THE SUM OF THE PARTS

The problems we typically study in enterprise risk management are framed at the level of a whole business. At this level it is nearly always the case that the uncertainties in the company's performance arise from a multitude of linked factors. These types of systems are complex (they have many components interacting in a non-linear way) and adaptive (the nature of the components and their interactions change over time). Decades of study by many academics tell us that such systems resist simple reductionist techniques of analysis because the interconnections and feedback loops preclude holding some subsystems constant in order to study the others in isolation. It is therefore necessary to describe such systems at multiple scales in order to identify how emergent properties are produced—reductionism and holism are needed as complementary strategies. Complex adaptive systems differ from chaotic ones by

virtue of their history. They evolve over time through a series of irreversible events, and, whilst they retain structure, they have the capacity to produce quite exotic behaviors.

So, the classical reductionist approach is simply not going to work when faced with such a complex system. The emergent nature of the outputs being studied means that they cannot be understood simply by studying the contributing parts—it is the interactions between the parts that determine the outcome. Clearly

tical model to these very different modes of behavior is extremely challenging without prior knowledge of the different modes that the system can operate in.

This feature of the reductionist method is fundamentally because the models and analysis are fitting to "outcomes," assuming they follow some kind of repeatable statistical process, without knowing what the mechanism really is and replicating that. Whenever the drivers of the real situation us to know when subtle changes in conditions might lead to unpalatable outcomes. By studying the mechanism of emergence we are able to gain a much better understanding of when those subtle changes matter. Figure 1 shows that we need to gain a deeper understanding of the system if we want to see things early and model unusual behaviors.

Intuitively this feels like a much more realistic view of the risks that we study as professionals in the real world. So, how does one study complex adaptive systems productively to gain these insights?

SYSTEMS THINKING

As discussed earlier, a systems approach seeks to elicit an understanding of how the overall behaviors of the system are produced. Since the behaviors are emergent, this has to start by considering the whole, and expressed in terms of all the interacting factors that contribute to the observed behaviors. It is important that all of the non-linear relationships are retained in the explanation as they often generate some of the more "unusual" or "surpris-

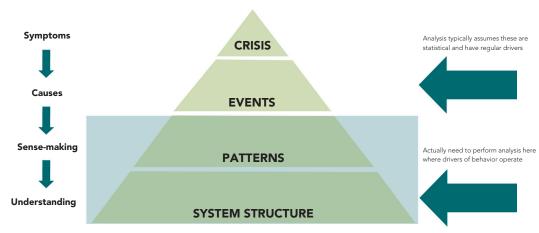
... THE ADDITION OF SYSTEMS THINKING TO OUR TOOL KIT IS TO HELP US WORK OUT WHEN THE APPROXIMATIONS OF THE SIMPLER MODELS ARE VALID AND WHEN THEY ARE NOT.

reductionist models have value in some situations, so the addition of systems thinking to our tool kit is to help us work out when the approximations of the simpler models are valid and when they are not.

The adaptive nature of the system also means that these interactions are changing regularly. Building a model based on historical behaviors, or those at one point in time, will leave the model unlikely of being capable of generating the full range of behaviors of the system as it evolves forward. Risk frameworks therefore tend to lag behind reality, thus the models and tools know about all the risk outcomes that have happened in the past, but are not very good at all at predicting the next one. Consider modeling a new type of pandemic. Early on the data only relates to the initial phases of the contagion's development when things move quite slowly. Later, when other factors have come into play, the disease starts moving much more quickly. Trying to fit a statischange, we see the models and framework become less useful and declare the event as a "tail" event-in reality it was more likely that we just were not capturing the system behaviors well enough.

For the study of risk, we typically want to know about less frequent events that require

Figure 1: Spotting the Emergent Behaviors of Complex Systems Means Going Below the Surface





ing" behaviors. In this way, systems thinking helps us to see both the forest and the trees.

Earlier in the study of systems, many techniques were focused on so-called "hard" systems. Checkland (1993) describes these systems as being "characterized by the ability to define purpose, goals and missions that can be addressed via engineering methodologies in attempting to, in some sense, 'optimize' a solution." However, the concept of "soft" systems was added slightly later, being those "characterized by extremely complex, problematical and often mysterious phenomena for which concrete goals cannot be established and which require learning in order to make improvement. Such systems are not limited to the social and political areas and also exist within and amongst enterprises where complex, often ill-defined patterns of behavior are observed that are limiting the enterprise's ability to improve." Risk management often involves dealing with hard systems embedded within soft systems, but many of the tools used by risk managers are designed for hard systems. So, it is the tool kit for the soft system elements that typically requires enhancement, and this brings the appropriate context for the other tools.

To understand how the system of risk works in an enterprise, we therefore need to look at the company as a whole-comprising people, cultures, agendas, processes, and technology all interacting with an environment of macroeconomics, competitors, etc. Mitleton-Kelly (2003) describes complexity as the inter-relationship, inter-action and inter-connectivity of elements within a system and between the system and its environment. It does not take too long to realize that much of this system is soft.

Extra Info

FOR MORE INFORMATION ON THIS TOPIC, VISIT THE WEBSITES LISTED BELOW.

Learn more about risk management—take SOA Risk Appetite and Enterprise Risk Management e-courses at soa.org/ecourses

Chat with your peers on this and other topics—join the Joint Risk Management Section at soa.org/sections



APPLYING SYSTEMS THINKING IN **PRACTICE**

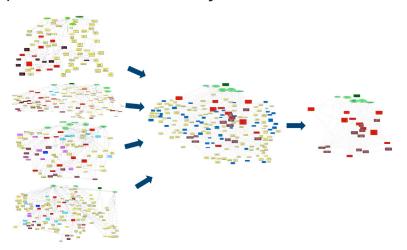
One of the best sources of information about this complex system is the people in your business. They see the system operating every day and have a good understanding of all the peculiar things it does, and have probably spent time thinking about things it has not done yet, but might do in the future. A challenge, however, is to find a way for these experts to tell the part of the story that they know, in a manner that permits their piece to be combined with those of others. If we had a way to combine and study their collective knowledge of this complex system we would be well on the way to a proper understanding of the system structure that produces the outcomes of our organization.

We know that a feature of complex adaptive systems is that they are highly nonlinear and often give rise to non-intended consequences. This makes it hard for people to see how their actions and those of others interact to produce the observed outcomes. Even where someone has devoted time to understanding the many subtle dynamics of the system, it can be hard to express that to others. This lack of understanding is often then translated into a

deficient model-one that captures the obvious behaviors but is not capable of producing the more unusual ones. The use of stress tests or scenarios does not always uncover the relevant unusual behaviors as cognitive biases frequently prevent people from imagining the right things to investigate. How do you model something you haven't considered?

If we pause to consider the financial crisis, which is still playing out, we can see how a systems approach might have helped to prompt action earlier. Before the crisis broke, there were a number of experts who claimed to have spotted a buildup of pressure in various parts of the financial markets. The problem was that, despite communicating this to others, the connection between these early warning signals and the final crisis seemed so far apart that most people thought the warnings were either too early, or incorrect, and there was insufficient sense of urgency about the situation. If more risk frameworks (particularly those in the regulators) had been using systems approaches to visualize the manner in which these warning signals were dangerously connected, it would have been evident that this set of circumstances could unravel very quickly. A systems approach could not have forced people to listen but it would have made the point of the message much clearer to more people.

Figure 2: Cognitive Mapping Can Be Used To Combine Perspectives and Distill Key Features



One tool from the soft systems tool kit that helps us here is "cognitive mapping" (Eden, 1988). This is a technique to visualize the complex and non-linear relationships between different concepts or cognitive constructs and it provides the framework for us to recombine the different perspectives from our experts into a cohesive view of the system (see Figure 2 above).

Once we have a structured understanding of how the various factors interact to produce the final impacts on business performance, there are some special features we particularly want to understand:

- Accepting that all of the factors somehow contribute to the system's behavior, which ones are particularly important?
- Which factors are especially important in the sense that they ultimately trigger significant outcomes?
- Which combinations of factors are preventing the system from entering an unstable state?
- Which combinations of factors are par-

ticularly inflammatory and could lead to highly undesirable outcomes?

This information gives us a deep insight into the dynamics of the sources of uncertainty in our business performance and provides a solid platform upon which to build strategies for: how we might identify emerging areas of risk or uncertainty; or, how we might allocate resources to achieve a resilient and robust organization. By using soft systems tools at this stage we explicitly recognize that different people in the business will potentially perceive the situation differently, and our assessment of their input is not pejorative—we simply use our tools to understand the context and likely consequences of their view of the world. Faced with these differing views we are now able to study the consequences in terms of risk outcomes and make a rational choice about how best to respond.

Note that this is very different from a reductionist approach. We have not yet sought to study pieces of the system out of the context of the whole. We have remained focused on the whole at all times and have only tried to identify which parts of it are particularly significant to the overall behavior. Also note that it is quite different to assume that behaviors average out to permit statistical approaches when we consider sufficient numbers of people-e.g., a whole market. Understanding the mechanism at work we know that rapid shifts in underlying behaviors can take place, which statistical models would not anticipate.

Once we have a solid understanding of the dynamics we can revisit our existing models and frameworks to ask whether they cater for all the behaviors we now know to be possible. It is likely that they will cover some subset at least. If we can now see behaviors that it cannot reproduce, we can consider whether these can be illustrated using a scenario or whether new functionality is required.

Humans have evolved a good ability to spot patterns, and it is one of our favorite problem-solving tools. We can use this skill without having a full set of data about a problem and yet still make reasonable judgments about how things are related just from the patterns we see. Making sense of complex systems is partly about spotting the patterns in events that give us clues about the underlying system mechanism. We therefore need to be able to spot the patterns in company performance drivers that will tell us about the underlying system behavior creating our organization's outputs. Many risk systems classify data at the point of capture by applying a reductionist hierarchy of labels (e.g., credit, fraud, IT, people, etc.). This destroys much of the non-linear connectivity information needed to spot the patterns as it is implicitly assuming that items under each label are homogeneous. Many risk registers are therefore highly unlikely to tell you



Complex Systems for Risk Appetite

THE U.K. ACTUARIAL PROFESSION commissioned research in June 2011 relating to risk appetite and emerging risk. The study applied a complex systems approach to the two problems—they are both hard to resolve using traditional methods due to the complex interactions of the parts they are trying to make sense of, and the fact that the interactions change. The science behind this article and the case studies of the research is discussed in the final paper which can be accessed at http://bit.ly/yaJBRo. The project, led by Neil Cantle, was carried out by Milliman and the Universities of Bristol and Bath.

about emerging risks because their ability to do so has been removed when the risk was coded into the register.

Another common problem is that people often make a prior judgment about what they expect to see in the risk information being studied and then apply tests that really only work well for linear phenomena to see if they were correct. A systems approach requires an open mind when looking at the risk information to spot patterns that we were not previously expecting, and we need to use tools that are designed for non-linear behaviors (e.g., mutual information measures) when we test for relationships between factors.



SUMMARY

There is no argument that the modern world is growing in complexity and the firms we work in are anything but simple. Yet we study these systems with tools at a first step that should often be used later, after the system has been understood and the appropriateness of any

approximations confirmed. The reductionist approach used too early risks missing vital information about non-linear adaptive behaviors that we need to see as risk professionals. We also see that a systems approach can help to put expert views into context so that their insights can be leveraged across a wider audience. This article has introduced some of the ways you can look at the world holistically, but rapidly get to an understanding of which tools can be used to model and manage risk appropriately. A

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BIBLIOGRAPHY

Checkland, P. (1993). Systems Thinking, Systems Practice.

Eden, C. (1988). Cognitive mapping. European Journal of Operational Research 36:1-13. Mitleton-Kelly, E. (2003). Ten Principles of Complexity and Enabling Infrastructures.



RISK MANAGEMENT BEGINS AT HOME









A PERSONAL TALE OF LIVING THROUGH A HARROWING NATURAL DISASTER AND THE LESSONS LEARNED. BY SUE SAMES

HILE CONVENTIONAL WIS-DOM WOULD SAY Connecticut has a pretty mild natural disaster profile, I'm beginning to wonder. Within a recent four-month period my adopted state was hit with an earthquake, tornadoes, a tropical storm landfall, as well as a snowstorm that caused a catastrophic, statewide power outage. Previously I would have definitely pegged this string of events as a less than a 1-in-200-year occurrence, a common risk management benchmark. However, as a friend recently joked, "It seems the 1-in-200year events are happening more frequently than they used to."

I grew up in Minnesota and thought I knew snow, but I'd never seen anything like the kind we got just before Halloween this past year. Connecticut got socked with more than 12 inches of wet, heavy snow—the devastating kind. Trees just can't stand up to the weight of all that snow. Although the snow was gone after a few days, it left behind unbelievable damage. It isn't much of an exaggeration to say that our neighborhood looked like a war zone.

While some power lines snapped, they can apparently support an amazing amount of weight. We saw big limbs hanging from lines or sometimes an entire tree leaning on a power line at a disconcerting angle. The streets in many neighborhoods were initially cleared by groups I called "husbands with chainsaws" and the local newspaper called "vigilante tree trimmers." Whatever the name, if it hadn't been for them, it would have been at least a week before we would have been able to drive out of the neighborhood. Even with their work, there was only one way in

and out of our neighborhood. It entailed driving a serpentine pattern down the street avoiding downed trees on one side and lowhanging power lines on the other. Driving over downed lines could not be avoided. In some places, you couldn't see oncoming traffic and just had to proceed slowly and hope for the best. Some streets were beyond what neighbors could do. Sadly, there was one death in a nearby town caused when that town's volunteer fire department could not make it through tree debris blocking the street in time to reach the victim. Debris is such a dainty, inadequate word-makes it sound like litter.

PERSONAL RISK MANAGEMENT



My family does a responsible job of personal risk management. We take forecasts seriously because without electricity, we have no heat or running water. We have a plan in place in case of a power outage: we keep our cars' gas tanks filled; we have gallons of drinking water in the basement; we have a variety of canned goods; we have a crank-operated weather radio; we also have a generator (although it failed us when we needed it most); we have a propane stovetop, flashlights, candles; we fill our cooler with ice and perishables and our bathtub with water before a storm (so we can flush the toilets). In short, while we don't stockpile duct tape and plastic sheeting, we are reasonably well-prepared for several days.

We were without power at home for 11 days. There were many memorable moments from the power outage. Many were funny—at least in hindsight.

ODD SILENCE



There was no newspaper delivered on Sunday morning, the day after the storm. We didn't have reliable access to any digital sources since our Internet was down and cell phone coverage was even poorer than usual. So later that day, desperate to figure out what was going on, my husband and I headed out in our car with our 20-year-old son and our 85-pound dog. It's hard to describe the level of damage. Our town is heavily wooded; there were downed trees everywhere. One large oak tree fell completely across a major road. However, one lane was passable (sort of) provided you were willing to drive on the shoulder of the road underneath the canopy that the branches made. It reminded me of the giant redwood tree in California that you can drive a car through.

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DISASTERS AT: http://www.soa.org/brb-0611

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DISASTER RISK: http://www.soa.org/rsn-2011-stern



That first day was a beautiful, sunny, warm day. (It would stay that way all week and turn out to be the warmest November on record.) It was very odd with no power. No traffic lights were working. Towns ran out of the portable stop signs. They also ran out of the "Road Closed" signs or perhaps they just didn't bother since there were so many.

All the stores we saw were closed except for one grocery store and a family-owned hardware store in a neighboring town. Although they were completely dark inside, the front doors had been propped open.

The sign on the door to the grocery store said:

Open for Purchases of Non-Perishable Items Cash Only

While my husband watched the dog, my son and I went grocery shopping in the dark, using a key-chain flashlight. We used some of our cash reserves to purchase more bottled water. We also shopped at the family-owned hardware store next door. It was the first time I'd ever purchased anything using a handwritten IOU. It was for \$64.99, not an insignificant amount for an independent business. (One big lesson we learned from our experience was to always make sure to have sufficient cash on hand for an emergency like this. No power means no credit cards, no ATMs.)

GIMME SHELTER



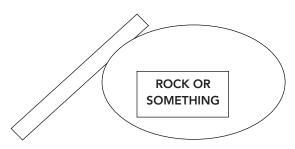
On the second day, Monday, our local paper, The Hartford Courant, was delivered. I was so damn grateful to have a source for news. Rick Green, a news columnist with the Hartford paper, wrote that a local chef served "beef brisket, lobster ravioli, and trout with dill sauce" for dinner at the Simsbury shelter. He also wrote about the wedding planned the next day. (It seems an older couple who'd been planning to have a small wedding at a house in town decided to hold it at the high school auditorium instead.) Green also wrote about the sing-along the first night, made it sound just like camp, only without roasting marshmallows for s'mores. The next day, the shelter began checking IDs. Although each town had its own shelter, Green's column had made ours sound so cool that neighboring townsfolk were crashing.

Although my husband and I never stayed overnight at the shelter, we did spend a fair amount of time there over that first week. It had many advantages. It was close by. It had heat. It had coffee. It had meals. It had showers with warmish, sometimes hot, water. It had power strips.

At one point, I wrote the following in an IM exchange with someone in Corporate Purchasing:

"I never in my whole life thought I'd ever be typing the following sentence: 'I'm sorry, but I have to sign off now ... they're serving lunch at the shelter."

The shelter distributed military MREs, which stands for Meals Ready-to-Eat, that could be prepared at home. MREs are self-heating and come in narrow cardboard boxes about 4 by 8 inches. We tried the beef stew. It was quite



good, honestly. Here are the directions: tear open the pouch, insert the heat packet, add 40 ml of water, put pouch back in the cardboard box, and, lean it at an angle against a "ROCK OR SOMETHING" for 12 minutes. The directions include an illustration, which is copyrighted so I've approximated it above.

> The original drawing of the "ROCK OR SOMETHING" looked more like a ROCK, less like a SOMETHING and certainly nothing like the oval that's the best approximation I can do with my limited Word picture-art skills.

Natural Disaster Facts

IN 2011, "total weather losses were more than \$35 billion, not including Hurricane Irene," according to National Oceanic Atmospheric Administration.

THE HUFFINGTON POST REPORTS "there were more than 700 U.S. disaster and weather deaths, most from the tornado outbreaks this spring." It goes on to state that in 2011, "The United States ... had a record 10 weather catastrophes . . . : five separate tornado outbreaks, two different major river floods in the Upper Midwest and the Mississippi River, drought in the Southwest and a blizzard that crippled the Midwest and Northeast, and Irene."







WHAT'S TRULY IMPORTANT



At the shelter we learned that we could get water at the fire stations. You bring your own containers and fill them up at an outside faucet. This was a big help, as it meant we no longer had to melt snow in buckets, which is a very slow process when the house is 47 degrees. (Throughout this time, if I had to convey to someone how intense this situation was, I summed it up with "We are melting snow in buckets to be able to flush our toilets." There is simply no way to trump that.)

after we got power back, we took it in stride. Having to fork over another \$1,400 hurt, but we used the rest of our stockpiled water from the fire station so, at least we weren't having to melt snow in buckets.

ALMOST THERE



Otherwise things are getting back to normal. We've pretty much replaced the contents of our refrigerator. FEMA (Federal Emergency Management Agency) is helping towns with clean up. Our town alone had to dispose of

our cool shelter, it has run pieces under the theme of "Power Out(r)age" covering the myriad ways CL&P mishandled the situation. Its human interest stories ranged from people dealing with post-traumatic stress syndrome to couples entering marital counseling after too much enforced togetherness. We've expanded our vocabulary to describe the damage, e.g., "widow-maker," is an old-time forestry term for a large branch hanging vertically from a tree, poised to fall on people—hence the name.

Not to downplay the considerable issues that the state needs to confront on our preparedness for the next disaster, but really there is nothing like facing adversity together to bring you closer as a family or to strengthen your resolve as a community.

For my part, I'm waiting for the Courant's follow-up stories on the outage-related mini baby-boom that's surely coming a little less than nine months from last Halloween.

Sue Sames, FSA, MAAA, is a consulting actuary with Towers Watson. She can be contacted at sue.sames@ towerswatson.com

GETTING THROUGH THIS ALSO HELPS PUT OTHER ISSUES INTO PERSPECTIVE AND MAKES IT EASIER TO GET THROUGH LESSER PROBLEMS.

Several days into our shelter routine, many of us displaced businesspeople were sitting at the power strip station working at our laptops. A mother stopped by with her two small boys and asked if we would mind if she plugged in her son's nebulizer. Of course we didn't mind; in fact, I'll always appreciate that episode's lesson in what's truly important.

There were other lessons. We found that not having electricity at home eliminates a lot of digital distractions. Time has never passed so slowly, and we've rarely slept so well.

We lasted this way for a week. After seven days, we relented and replaced our generator to the tune of \$699 plus tax. Although we were surprised to find generators in stock at a legitimate retail outlet, they were pretty much always available off the back of a truck parked in front of the local self-storage outfit.

Getting through this also helps put other issues into perspective and makes it easier to get through lesser problems. For example, when our water pump shorted out a week more than 275,000 cubic yards of tree debris at a cost of an estimated \$3.5 million. A truck came down our street three weeks after the storm to pick up the tree debris that's been neatly stacked in our front yard since day seven. Storm debris is being staged at an 11acre field that happens to be across from my company's offices in town. There is debris in stacks several stories high. It reminds me of the junkyard scenes in "Wall-e." There is a wood chipper the size of a semi-truck. It sounds like an airplane revving its engines and is making the whole area smell like pine air freshener.

Another sign that things are getting back to normal: the power outage is now a marketing opportunity. We recently received a directmail advertisement from GE for automatic generators. The offer is to put us in touch with a local dealer; it is not a discount. Since these run about eight to 10 grand, I think we'll wait until we pay off our water pump, since I don't think GE is taking paper IOUs.

The Hartford Courant had a long run with this ongoing story. In addition to the column on

RESEARCH

BEING PREPARED FINANCIALLY

is another form of personal risk management. For information related to financial preparedness and risk management, see the recent reports that deal with retirement risks by following the links below.

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Education

INTERNATIONAL FOCUS: CHALLENGES FOR ACTUARIES IN ASIA

BY MARTHA SIKARAS AND WAI LING YUNG

THE YEAR OF THE DRAGON serves as an appropriate backdrop for an article focused on the challenges faced by actuaries in Asia as they strive to keep their professional education up-todate. The dragon is considered both a symbol of good fortune and sign of authority. Certainly, there is no more opportune time for actuaries to utilize their risk management training and serve as key players in leading their companies through the complex issues of modern-day financial services. At the same time, the Society of Actuaries (SOA) has plans to enhance its presence, influence and member service to those members outside of the United States and Canada. Most recently, the SOA announced its decision to begin offering an exam track in general (property-casualty) insurance in 2013, helping fulfill the strategic vision for the SOA to be the leading global provider of actuarial education. (Please see the "Letter From The President" on page 10 for more information.) That commitment to an international focus is part of the strategic recommendations approved by the SOA board of directors in October 2011. The recommendation, based on a yearlong effort of the SOA's International Membership Strategy Task Force, commits the SOA to:

- 1. Strengthen the value of the SOA credentials in today's increasingly global environment,
- **2.** More effectively meet the needs of the SOA's members in the context of rapidly growing internationalization, and
- 3. Advance the reputation and impact of the actuarial profession globally.

The task force and the new International Committee, which has assumed the work begun last year, recognizes education, both pre- and post-credential, as a critical component toward meeting these goals. The International Committee has representation from a cross-section of the membership but, importantly, designated representatives

from the Education Executive Group, the Professional Development Committee and the International Section.

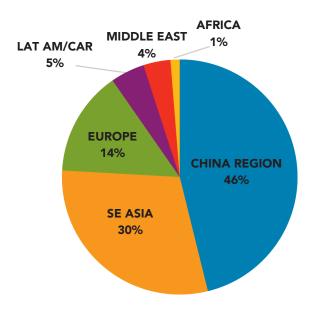
Over the years, the SOA has seen substantial member and candidate growth in the Asia Pacific region. See table below.

Of the close to 3,000 ASAs and FSAs resident outside of North America, 46 percent are residents of Hong Kong, mainland China or Taiwan, collectively labeled as the China Region, and 30 percent are in Southeast Asia, including Singapore, Malaysia, South Korea and Indonesia. See pie chart, pg. 29.

From past SOA member and candidate surveys, as well as the 2011 focus group study conducted by the SOA, some shortcomings in

REGION	TOTAL FSAs AND ASAs					
	1995	2005	2011	% INCREASE FROM 1995 TO 2011		
CANADA	3,153	3,485	4,004	27%		
UNITED STATES	11,411	13,551	15,764	38%		
REST OF WORLD (ROW)	1,248	1,780	2,937	135%		
TOTAL	15,812	18,816	22,705			

2011 Member Distribution Outside United States and Canada



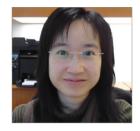
the area of post-credential education were identified. The most critical are:

- Perception by international members that there is less focus on relevant research and professional development, and
- Non-delivery of SOA professional development face-to-face learning opportunities locally.

The focus group work also yielded information on some possible areas of improvement for the SOA. See table below. From industry reports and information supplied from local area volunteer groups such as the China Region Committee, we also know that there is increased demand for more training on everevolving standards, both nation-specific and international. Thus, with the challenges clearly defined, the SOA has begun making plans to



Martha Sikaras



Wai Ling Yung

address the needs. First, the new International Committee will be working closely with the Professional Development Committee to draw up plans to begin to address the gaps. In 2012, plans are underway for several inperson events in mainland China and Hong Kong with research into the feasibility of expanding beyond those markets. Those plans include a seminar jointly produced by the International and Investment Sections as well as the 2nd Annual SOA Symposium in China. The first such symposium took place in late October 2011 and the staff and volunteers involved in the process took

GLOBAL RESEARCH	INDUSTRY NEWS AND STANDARDS	COMMUNITY	SPECIALIST KNOWLEDGE	PERSONAL DEVELOPMENT
Many members identified the need for the SOA to provide greater research and education regarding non- U.S. markets.	Most members believe the SOA does a good job of distributing information on industry-related matters, including providing links to relevant resources.	Most members agree that the SOA is not reaching out to members outside the United States and should offer presentations, online conferences, webinars, etc.	Many members expressed a need for learning opportunities in advanced topics applicable to a variety of markets.	Most members saw improvement in coverage of personal development (communication, business skills, etc.) topics in the past several years.
		Some members recognized that the SOA cannot be expected to reach every market.		

A Look at the Actuaries Joint Office in Hong Kong

N 1997 THE SOA opened a representative office in Hong Kong. Today the office is jointly funded with four partner organizations: Actuarial Society of Hong Kong (ASHK), Institute and Faculty of Actuaries (UK), Actuaries Institute (formerly named the Institute of Actuaries of Australia) and the Casualty Actuarial Society. The office is

staffed with three full-time employees. The Joint Office serves practicing actuaries and candidates in Hong Kong, mainland China, Taiwan and other countries within the Asia-Pacific region. Through this extension, we continuously cultivate the professional development opportunities, international growth and research outputs for our members, candidates and partners worldwide. For SOA

members in the region, the Joint Office is likely most wellknown as the organizing force behind the annual Joint Regional Seminar (JRS). The JRS program assembles a group of speakers around a focused topic and then visits four to five countries within a 10-day period, with the full support and involvement of the local actuarial association. The Joint

> Office staff consists of Pat Kum, manager of Asian Services, and her operations support staff of Emily Lye and Tiffany Wong. In 2011, the SOA hired Wai Ling Yung, Ed.D., as its programs manager. Dr. Yung is housed within the Joint Office, but is dedicated solely to the development of locally relevant CPD content as well as local university outreach programs. A



away valuable insights to be applied to the 2012 program.

In addition, because the SOA is aware that even local-area in-person events may be out of reach of some members, the SOA will be looking to expand its repertoire of globally relevant and available (offered in local time) webinars and e-Learning programs. The SOA's China Region Committee has been working diligently for many years to provide content and interactive learning opportunities and look to build upon a strong history of volunteer support in the region. A strong and efficient volunteer network will keep the SOA apprised of changing needs, enabling it to be more nimble and produce content in a variety of accessible formats. In his travels while

serving as president of both the SOA and then the International Actuarial Association (IAA), Cecil Bykerk, FSA, MAAA, FCA, HonFIA, observed, "As I toured many of the Asian countries and talked to many new actuaries as well as seasoned actuaries, it is clear that the profession is growing rapidly in those countries. The demographics are clearly skewed to younger people with limited actual hands-on experience. One of the more interesting elements of addressing these challenges is that it has encouraged us to make use of many of the electronic tools that seem to come on line almost on a weekly basis. As we learn to provide educational opportunities at a distance, we also recognize that we can use those in North America as well."

Conversations with members in South Korea, Taiwan and mainland indicate our members are interested in more training opportunities to develop better business skills such as presentation and communication, and effective means to access actuarial materials published globally. Academic members also addressed the need for more publishing opportunities in worldwide recognized journals.

Genghui Wu, FSA, and current chairperson of the SOA's International Section says, "A particularly interesting challenge with international actuaries lies in the area of determining the needs of those who work in a variety of countries and who face interacting in different cultures and possibly adhering to multiple codes of professional conduct." Addressing those needs is further supported by August Chow, FSA, CERA, FCIA, a member of the International Membership Strategy Task Force and a past chairperson of the SOA China Region Committee, "More recently, local associations in the region have implemented their own CPD requirements on their members, for instance in China and Hong Kong. Many of the local associations welcome partnership and knowledge-sharing opportunities. The SOA has a vast network of volunteers and speakers and has much to contribute to fill local CPD demands," says Chow.

There is also benefit for domestic members seeking more information on what is happening outside the United States and

Canada. One of the value statements that the task force adopted early on was that the international strategy work must be accretive to the value of the SOA credentials and the strength of our brand, to the benefit of all our members around the world. "As the SOA increases the CPD offerings in Asia, it will provide a forum for our members in the region to become better connected, to form a closer community. I believe this will lead not only to a stronger SOA community, but ultimately to strengthening and growing the overall actuarial community in the region," says Darryl Wagner, FSA, MAAA, chairperson of the SOA International Committee. He and the SOA volunteers and staff working on these goals envision an increased sharing of knowledge to and

from the Asia region, which will ultimately benefit all our members as we learn from each other's experiences in a truly global community. A

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Section Highlights

ACTUARY OF THE FUTURE SECTION

WHAT'S A DELPHI STUDY?

The first vision I used to imagine when someone mentioned a Delphi study to me was of an ancient Greek oracle—a priestess standing amid mysterious vapors coming up from the earth. She would be giving a cryptic prediction of the future ... and not from a spreadsheet.

Yet here, in 2012, the Actuary of the Future Section (AOF) proposed and is cosponsoring (with the Entrepreneurial Actuaries and the Forecasting & Futurism Sections) a Delphi study about future career opportunities for actuaries! As you may have guessed, it won't utilize a priestess or mysterious vapors. This is a relatively modern technique. It involves the use of a group of independent individuals with diverse backgrounds and perspectives collaborating on the answers to study questions in an anonymous manner. It is done in such a way that each participant gets to see responses from the others with no idea who submitted them. The result is an atmosphere where each viewpoint is evaluated without regard to organizational hierarchy. The responses may cause some participants to alter their original opinions in light of the new insights from others. That's fine. The group may, after successive rounds, come to a consensus opinion; or to a set of alternative opinions. The study ends when opinions stop changing. Surprisingly, Delphi studies have been very effective as predictive models of future behavior-often far more effective than the predictions of a noted expert in the particular area. The Actuary of the Future Section Council members and friends of the council are excited about Delphi studies, complexity science, new ways of sharing information (like podcasts) and many other tools and techniques we think will better prepare us to remain viable and effective in the world of the future. And that is the purpose of our section—to identify and promote new opportunities, skills, and new ways of thinking to help you, as actuaries, excel on your career journeys.

Perhaps the Oracle of Delphi herself saw this as a future fit for actuaries.

Dave Snell, ASA, MAAA, is technology evangelist for RGA and is the 2012 chairperson of the Actuary of the Future Section. He can be contacted at dsnell@rgare.com.

SOCIAL INSURANCE AND PUBLIC **FINANCE SECTION**

THE SOCIAL INSURANCE AND PUBLIC FINANCE SECTION was formed roughly three years ago. Our goal is to provide education and research on actuarial issues fundamental to the design, management and financing of financial security systems operating in the government domain. Examples of these systems would include public pensions, Medicare, Medicaid, unemployment benefits, flood insurance and workers' compensation benefits. Many of these systems are experiencing financing difficulties, while trying to satisfy the needs of various stakeholders.

The current focus of our section can be summarized as follows:

- 1. We will identify areas of concern within the major financial security systems that impact public finances, highlighting the unrealistic assumptions and/or methods that have created problems. Subsequently, we strive to educate actuaries and the public about these issues, while offering viable alternatives. Currently, four subgroups have been formed to help address our goals:
 - Public Pensions,
 - Social Security,
 - Government Health Care Programs (i.e., Medicare and Medicaid), and
 - · Health Care Reform.
- 2. We will identify actuarial heroes concerning these systems. These will include actuaries who have pointed out and quantified problems in the assumptions or methods, despite often taking personal risk for their actions.
- 3. We will promote efforts to enhance the Actuarial Standards and Code of Conduct. The current standards and code require the actuary to follow the law when rendering opinions of the financial health of these systems. In addition, we believe actuaries also must point out problems/issues created by the law that could threaten the health of the system or facilitate/dictate the use of assumptions or methods that are unrealistic or misleading.

Our section has recently solicited help from its members to form the above four subgroups. We have been quite pleased with the response received. We look forward, through these groups and our council, to making positive contributions to these public systems so that

we can serve the public interest and our profession. A

Mark E. Litow, FSA, MAAA, is a consulting actuary with Milliman, Inc., and the 2012 chairperson of the Social Insurance and Public Finance Section. He can be contacted at mark.litow@milliman.com.

TECHNOLOGY SECTION

MEMBERS OF THE TECHNOLOGY **SECTION** span the spectrum of actuarial fields. We are united by our common interest in technology, its ever-growing uses, and how those uses can be applied to enhance and complement our personal and professional lives.

The Technology Section propagates knowledge across its membership in a variety of ways. One of the primary channels is the Technology Section newsletter CompAct, which has been Web-based since 2009. Over the past year, CompAct has presented articles from more technical ("R Corner-Extreme Gray Swan Scenarios—DMFBM," by Steve Craighead, April 2011) to introductory ("Five Easy Steps to Getting Started on LinkedIn," by J. Eddie Smith, IV, and other members of the Technology Section LinkedIn group, January 2011).

That last item shows another way Technology Section members discuss issues with each other: its LinkedIn group—open only to members of the Technology Section. Being the first of the sections to have a LinkedIn group, which started April 2009, the group boasts an interesting array of members. As of January 2012, the largest geographical concentration in the group comes from the greater Chicago area (14 percent of members) compared with Toronto (8 percent) and New York City (8 percent). The quick start guide referenced above came together with input from group members in LinkedIn discussions as well as a shared document on Google Docs.

In addition to its long-standing support of the mortality and other rate tables database at the SOA (which currently has its own subsite: mort.soa.org), the Technology Section has been contributing to the SOA project "Apps for Actuaries." In addition to sponsoring sessions at meetings on this topic, we look forward to developing it further in 2012, running a contest for app ideas from the membership as a whole. Keep an eye out!

Mary Pat Campbell, FSA, MAAA, is vice president, Insurance Research with Conning Research & Consulting, Inc., and is the 2012 secretary/treasurer & webinar coordinator for the Technology Section. She can be contacted at marypat.campbell@gmail.com.

J. Eddie Smith, IV, FSA, MAAA, is assistant actuary with Liberty Life Insurance Co., and is the 2012 chairperson of the Technology Section. He can be contacted at eddie@jesmithiv.org.



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Out Of The Office

ACTUARIES ON THEIR OWN TIME

I HAVE THE MUSIC IN ME

STEPHEN A. TAYLOR, FSA, FCIA, sings in a southern gospel quartet called the Revelations Quartet (Revelations). It's based in Ontario, Canada. The group started in 1962 near Kingston, Ontario when this style of music became popular in that area. At that time, Taylor played piano for the group. Now he sings bass.

A LITTLE HISTORY

I became involved in music at the age of six when my sister and I sang duets at various events including live radio. We sang together through grade school. During the upper grades I started taking piano lessons. In secondary school I picked up the guitar and enjoyed playing with a number of musical groups. During my senior year I discovered southern gospel music and developed a passion for it that still exists today.

Southern gospel music is written to express either personal or a communal faith regarding biblical teachings and Christian life. Traditionally the music was performed by male quartets with a high tenor singer and a low bass singer with instrumental accompaniment. The genre has its origins in the southeastern United States and is sometimes called "white gospel" to differentiate from "black gospel."

MATH AND MUSIC

Over the years, people have asked me what training is necessary to be involved in southern gospel music. Piano lessons are certainly of value and the ability of singers to read music is a definite asset. Having an ear to sing parts and tune chords is also important and is usually based on natural abilities that can be developed.

The connection between music and mathematics has been a definite plus for me. Notes and chords are related to each other mathematically. When I write music for singers and musicians, I use the Nashville Number System which uses numbers for notes and chords. I never use traditional music notation or the familiar do, re, mi of "The Sound of Music" fame. Using numbers is easier because no matter what key the song is written in, the relationship of notes and chords is the same. Most studio musicians are familiar with such terms as fourths, fifths and sevenths which are used to describe the positioning of chords.

FOR THE RECORD

Over the years, the Revelations have travelled extensively throughout Canada and parts of the United States singing at churches, fairground events and concerts with audiences of up to 10,000 people. The group had its own television show for a period of time.

In the early years, the Revelations won a number of singing contests with one contest in the mid 1960s being the most exciting. The quartet was a three-time winner on the "Ted Mack Amateur Hour" which was based in New York



Stephen A. Taylor, on the right, with musical group Revelations Quartet.

City. It was a North American-wide talent show similar to the show "America's Got Talent." The prize from another contest was a recording contract and the group now has eight albums and one concert DVD.

HAPPY ANNIVERSARY!

This year, the Revelations Quartet is recognizing 50 years of singing with anniversary celebration concerts in the town (Napanee, Ontario) where the group had its genesis.

THE BEST REWARD

Over the years, there have been many rewards from my involvement with music. I appreciate most types of music. However my passion is southern gospel music and the most rewarding aspect of being involved with the Revelations is being able to share my faith with others through the medium of a type of music I love.

Stephen A. Taylor, FSA, FCIA, is retired and can be reached at stephen113@sympatico.ca.

PASS THE PEACE LIGHT

DAVID M. RUIZ, FSA, FIA, MAAA, didn't need any training to carry the Peace Light, just a willingness to bring Boy Scouts and Girl Scouts together to share a message of world peace.

MESSAGE OF PEACE

While serving as a leader in the Transatlantic Council (TAC) of the Boy Scouts of America (BSA), I learned about the Peace Light Project. What a great concept: scouts and guides could follow the original intent of Baden Powell (founder of the Scouting Movement) by sharing a living flame and a message of peace all around the world! As an Eagle Scout, there was never any question that I'd become involved. I worked with the scouts and leaders in TAC and in the U.K. Scout Association to help spread the Peace Light throughout Europe. Now that I'm back in the United States, I've worked with the American coordinators to bring the Peace Light to California. I have been a scout leader for seven years, since my son joined Cub Scouts. This year was my fifth Peace Light celebration.

IN MERRY OLD ENGLAND

In December 2007—to celebrate the 100th anniversary of world scouting-we shared the Peace Light in a small ceremony in a chapel in England. At the ceremony, there were American Boy Scouts and Girl Scouts, British Scouts and Guides, and a French Sea Cadet. Each child had an opportunity to make a wish for world peace while they passed the flame to each other. Those scouts and guides connected with each other and with the worldwide scouting movement. Seeing them dedicate themselves to spreading peace was incredibly moving. I've learned that young people will excel at a task when you get out of their way and let them do it. As always, it's the small things that remind me why I'm a scout leader!

AN EDUCATION

Being a scout taught me that I could accomplish anything I set my mind to, whether that was building a 20-foot-high signaling tower, backpacking 50 miles at Philmont Scout Ranch, or restoring two miles of trail for my Eagle Service Project. It also taught me the value and power of servant leadership, which I've practiced throughout my life.

THEN AND NOW

The BSA program starts in first grade now with Tiger Cubs. I couldn't start Cub Scouts until I was in third grade. The Venturing program, for boys and girls aged 14 to 20, is another new program more in line with the international programs for senior scouts. The other main difference I see is that scouting as a movement is much more connected today than it was when I was a scout. We're now able to work on joint projects like the Peace Light that we'd never have heard about 30 years ago.

At its core, though, scouting is the same as it always was—camping, hiking, merit badges and service projects. The scouts still have the same fun at summer camp and on weekend campouts. After 102 years of success, we seem to have landed on a winning formula!

IT'S A PRIVILEGE

I love my job, but it's nice to be able to leave the office and give back to the community. It's great to help young people learn to be leaders. It's wonderful to be part of a group of scouts helping a charitable organization with a food drive or a service project.

The mission of the Boy Scouts of America is to teach young people to make ethical



David M. Ruiz at statue of Baden Powell, in England, with daughter, Talia, and son, Brennan.

choices throughout their lives by instilling in them the values of the Scout Oath and Law. As a scout volunteer, I'm preparing the next generation to take their place in society as active citizens and leaders. As a Transatlantic Council Board Member, I've been privileged to be part of an organization that is making a difference in the lives of thousands of kids. Knowing that I've made a difference is reward enough for me.

David M. Ruiz, FSA, FIA, MAAA, is AVP, valuation actuary for Pacific Life Insurance Co. He can be contacted at david. ruiz@pacificlife.com.

> FOR MORE OUT OF THE OFFICE. **TURN TO PAGE 36**

ROCK CLIMBING AND MOUNTAINEERING ROPED HIM IN

When a friend and coworker asked ERIC JANECEK, FSA, CFA, MAAA, to go rock climbing about 10 years ago, he kissed the ground goodbye and headed upward.

400 FEET UP

On my first climb, we went with some professional climbing guides to Looking Glass Rock in North Carolina. It was a lot of fun: beautiful views in a remote national forest, the satisfaction of making it up difficult routes, the excitement of being 400 feet up, trying not to fall. We later started climbing on our own, gravitating toward "trad climbing." Trad, or traditional climbing, is done outdoors. You have to place your own gear into the rock as you climb to protect against a fall and typically build your own anchor at the end of each section of the climb. The adventure, creativity and technical side of trad climbing is also appealing.

PURE BLISS

despite having ropes, the possibility of falling really focuses the mind on the present. Once you are climbing all of your thoughts about work, errands, the past and fade future

Climbing can be surprisingly

peaceful and relaxing:

away until you get to the top of the climb. I'm usually thinking of nothing but the next move or gear placement. This is sometimes referred to as "being in the zone" in other sports.

BACK TO THE BOOKS

Gym climbing can safely be done by anyone in reasonable shape with 10 minutes of instruction. Trad climbing and mountaineering require a lot of special training. Like a typical actuary, I read and re-read several books covering equipment, techniques, climbing knots, gear placement, anchors, self rescue, safety and many other topics. Instruction from professional climbing guides and feedback on the science and art of gear placement and building climbing anchors was invaluable. (Anchors are made out of climbing gear stuck in cracks in the rock. When constructed properly, they will hold you in case you fall off the rock.)

ANALYZING THE RISK

There is an incredible amount of overlap between the skills needed in my current position and rock climbing/mountaineering. My current job involves analyzing the risk profile of our life and annuity business and designing investment and hedging strategies to maximize the risk/ reward trade-off. Risk management is obviously important in climbing as well. Like actuarial work, climbing requires teamwork and communication, technical skills, attention to detail, creative problem solving, judgment and strategic thinking. Even more than in actuarial work, mistakes in climbing can have bad consequences. In both climbing and actuarial work, bringing creativity and technical skills to solve a difficult problem is exciting and satisfying.

AN AMAZING FEAT

My most rewarding experience was being part of the first team up the Emmons-Winthrop route of Mt. Rainier last spring. I went with two rock climbing friends. None of us had any mountaineering experience on snow and glaciers. We decided to go early in the season and without



Eric Janecek climbing Mt. Russell in California.

guides to make the trip more of a challenge and adventure. This was the first time I used snow shoes and crampons while climbing. (Rainier got more than 1,000 inches of snow last winter.) It was also the first time navigating with a compass and altimeter in white-out conditions, and going up and down steep snow slopes with hidden crevasses.

At one point, we literally couldn't see 10 feet in front of us. The deep snow and frequent snowstorms slowed us down, but like any good actuary, we included an extra two days in our plans as a "provision for adverse deviation." The extra two days and determination helped us finish the climb. I slept 14 hours the first day back home.

NEXT STEPS

The next adventure will be climbing "Groover" at Laurel Knob, North Carolina It's a two-hour hike from the trailhead to the base of the climb in a remote area in the western part of the state. The climb itself is 900 feet. Once you get above 200 feet, there is no way to get back down without finishing the route. After finishing, it takes five rappels to get down, followed by a twohour hike back to the car. If all goes as planned, we should be in the car shortly before dark. Of course, part of the appeal and adventure is that climbs do not always go as planned.

Eric Janecek, FSA, CFA, MAAA, is AVP and associate actuary with Lincoln Financial Group. He can be contacted at eric.janecek@lfg.com.

HELPING HEARTS HEAL

A friend of CHRISTOPHER M. STROM, FSA, MAAA, witnessed firsthand Strom's skill as a natural "grief buddy" when he was talking with someone who had lost a spouse to a long illness. Much to Strom's surprise, his friend suggested that he begin a bereavement support group. It took three years for him to take the next step, but once he did, an amazing set of events kept the effort going.

MY CALLING

After my friend suggested that I start a support group, the first thing that popped into my mind was, "Right, all actuaries start support groups." For three years, the idea would surface, and every time, I just let go of it.

In 2007, I heard that Dr. Alan Wolfelt, director of the Center for Loss in Fort Collins, Colorado was going to make his first stop on his book tour in Greeneville. South Carolina-where I live. I went to hear Dr. Wolfelt speak and had the opportunity to talk with him during a break. It was inspirational, but I wasn't convinced this was my calling.

I stopped at the various exhibitor booths, asking myself, "Should I do this or not?" I looked up and asked, "Should I do this or not?" The last booth I saw was one hosted by Lutheran Hospice. I stopped and asked, "Would you be interested in starting a grief support group?" The person staffing the booth was the bereavement coordinator. After talking for quite a while, she said, "Let's do this." I finally had my answer.

STARTING OUT

I talked with people with personal experience and read books on grief support. Because I had no formal credibility in this field, I teamed up with a Licensed Master Social Worker (LMSW) from a Lutheran Hospice to develop the program.

PROVIDING SUPPORT

My co-facilitator and I have run support groups since 2008. For two years, we ran two 10-week groups, a total of 20 sessions. After that, I found it such a worthwhile effort, we expanded to three groups per year. 2012 will be the fifth year of running bereavement support groups.

Bereavement support is far removed from my daily work as a financial reporting actuary. But I do feel compelled to develop a model of grief as to how it affects the bereaved. I refine my grief model with each group, as I gather more experience, much as I would refine my financial reporting models as new experience becomes known. I do whatever I can to help people who are hurting.



Christopher M. Strom reading about grief support and helping others.

THE POWER OF "THANK YOU"

One practical goal of my group is to bring folks along in their grieving to where they can talk about their loss without the emotional breakdown that is common in the first few weeks of the group. The higher goal is to help bring hope back into the life of someone who has suffered a great loss. The reward is when, at the end of 10 weeks, a group participant looks me in the eye and says, "Thank you," with heartfelt gratitude and my knowing that I have made a difference to that person.

Christopher M. Strom, FSA, MAAA, is assistant actuary. Actuarial Dept., at Athene Annuity & Life Assurance Company. He can be contacted at chris.strom@atheneannuity.com.

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The SOA At Work

STRATEGIC PLAN UPDATE

2012 IS THE FINAL YEAR of the SOA's current strategic plan. In October 2011, the board appointed a Strategic Planning Task Force, with Mark Freedman as chair, to analyze and present a recommendation for the 2013 - 2016 plan. The SOA has engaged Palladium Consulting Group to assist with the effort. (Palladium was founded by the developers of the Balanced Scorecard approach to strategic planning, and is the same firm that assisted us with the 2008 – 2012 strategic plan.)

The early work of the task force has focused on gathering input from a broad range of perspectives. The November 2011 Leadership Orientation meeting offered an opportunity to discuss strategy with volunteer leaders from the sections, the board, the Education Executive Group, the Professional Development Committee, and the Nominations Committee. Further information was gathered from the Employers Council in December 2011 as well as a series of one-on-one interviews with industry leaders conducted by Palladium.

Key themes and questions are emerging as part of the initial analysis:

• How do we expand opportunities for actuaries in new fields while continuing to grow relevance and demand in our traditional markets?

- Given the trend toward increasing globalization of the business world, how can the SOA add value for both North American members and the growing number of members outside of the United States and Canada?
- · How can the SOA continue to attract the most talented candidates, and to offer career-long learning opportunities for our members?
- What is the best path to ensure that SOA research expands the boundaries of actuarial knowledge, strengthens practice, and informs public policy?

If you would like to comment on these themes or suggest others, please use the Share an Idea form on SOA.org, or email Margaret Ann Jordan at mjordan@soa.org. On March 12, the Strategic Planning Task Force conducted a discussion with the board regarding the direction of the strategic plan, and presented a straw man version of the new strategy map. We will provide an update in this column as work on the plan progresses.

- SOA Executive Director Greg Heidrich

THE ACTUARIAL PROFESSION IN THE NEWS

The SOA is focused on raising awareness of actuaries in the media. Recent efforts have been successful. Here are just a few examples:

When The Smoke Clears, Will Your Life Insurance Quotes Be High?

Fox Business quotes FSA Jim Miles on life insurance rates for smokers. To read the story,visit www.foxbusiness.com, search term Barbara Marquand, or use the QR code.



The Cost Of Living Longer—Much Longer

SmartMoney quotes several actuaries discussing longer life expectancies. To read the article, visit www.smartmoney. com, search term Cost Of Living Longer, or use the QR code.



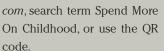
An Annuity Can Still Make Sense

Joe Tomlinson, FSA, MAAA, and Noel Abkemeier, FSA, MAAA, discuss retirement planning and annuities with The Wall Street Journal. To read more, www. wsj.com, search term Andrea Coombes, or use the the OR code.



Spend More On Childhood Nutrition Today, Pay Less Later

The Daily Iowan reports findings from research about the impact of obesity. To read the story, visit www.dailyiowan.



Safe Driving Tips For The Road To Retirement

Richard Schmitt, FSA, EA, MAAA provides tips on the road to retirement. To read more, visit www. thestreet.com, search term Richard Schmitt, or use the QR code.



Insuring The 100-Year-Old Client

Chris Bone, FSA, EA, MAAA discusses insuring the 100-year-old client. To read more, visit www.registeredrep. com, search term Chris Bone, or use the QR code.



View all of these articles by going to www.soa.org/newsroom and clicking on the Profession In The News link.

ATTENTION READERS!

If you have an idea for an article you think should appear in The Actuary, or a response to something you have read in these pages, tell us about it by sending an email to theactuary@soa.org.



THE LIFE INSURANCE CONFERENCE

April 23 – 25 Orlando, Fla.

THE RETIREMENT INDUSTRY CONFERENCE

April 25 - 27 Orlando, Fla.

LIFE & ANNUITY SYMPOSIUM

May 21 – 22 Los Angeles, Calif.

HEALTH MEETING

June 13 – 15 New Orleans, La.

47TH ACTUARIAL RESEARCH CONFERENCE (ARC)

Aug. 1 - 4Winnipeg, Manitoba

VALUATION ACTUARY SYMPOSIUM

Sept. 10 – 11 Los Angeles, Calif.

CRITICAL ILLNESS INSURANCE FORUM

Sept. 10 - 12 Las Vegas, Nev.

DI & LTC INSURERS' FORUM

Sept. 12 - 14 Las Vegas, Nev.

PRODUCT TAX SEMINAR

Sept. 20 - 21 Washington, D.C.

ANNUAL MEETING & EXHIBIT

Oct. 14 – 17 Washington, D.C.

View all Professional Development opportunities by visiting www.soa.org and clicking on Event Calendar.

Recommended Readings



The following is a list of recommended readings from the contributing editors that they feel will pique your interest and help keep you informed.

From Sue Sames

Last November, Dr. Daniel Diermeier, Ph.D., a professor at the Kellogg School of Management, Northwestern University, led a session at the SOA's 2011 Leadership Orientation on Reputation Risk. His book is Reputation Rules: Strategies for Building Your Company's Most Valuable Asset. Since his usual audience is CEOs of major companies, his material aims

to be useful to those at the top of the organization. For more information, visit bit.ly/soa-act-recoread1 or use the QR code.



From Sue Sames

With The Big Short, Inside the Doomsday Machine, Michael Lewis is back with a companion piece to Liar's Poker, his earlier expose on his experiences working in Wall Street's bond market. This time he's unraveling the story of the subprime

mortgage crisis. For more information, visit amzn. to/act-recoread2 or use the QR code.



From Sue Sames

A murmuration is a natural phenomenon with thousands of starlings circulating in undulating patterns at twilight. This four-minute video of a murmuration is accompanied by classical music and an unobtrusive Don Tapscott, author of Macrowikinomics, providing thoughts on how we might think of murmuration as a

metaphor for human social collaboration. For more information, visit bit.ly/recoread3 or use the QR code.



From Jim Ramenda

Bloomberg News: "Corzine Sought 'Yes Man' for MF Bet: Lawmakers." A quote from the article is, "U.S. lawmakers questioned whether MF Global Holding Ltd's decision to replace Michael Roseman as chief risk officer a year ago was driven by his warnings over bets on European debt that helped push the firm to bankruptcy." For more information, visit **bloom.bg/recoread4** or use the QR code.

THE ENTIRE ACTUARIAL TOOL KIT CONTINUED FROM PAGE 11

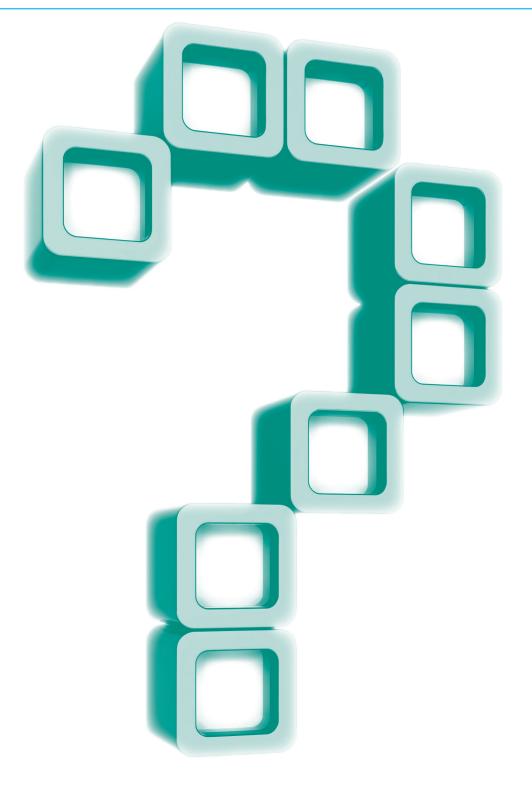
reserving. And the Enterprise Risk Management exam that will be offered for the first time this fall will include a general insurance case study. Finally, the modular design of our education system facilitates the addition of tracks for emerging practice areas. You may, for example, have read over the past few months how we are expanding our offerings for aspiring investment and finance actuaries.

A fully developed general insurance track will require updates to Exam C and FAP, and it will require the development of FSA exams that live up to the standard that you and the public expect of the Society of Actuaries. The most dedicated volunteers it has ever been my privilege to know, the members of the Education Committee, are prepared to deliver exactly that. Moreover, we are already making plans to recruit both local and global general insurance experts

to ensure that FSAs produced through this track meet U.S. and Canadian qualification standards and are prepared to be leaders in general insurance throughout the world.

Based on my actuarial education, I am no more prepared today to respond to my mother's question than I was when she posed it years ago. To fully realize our shared visionfor actuaries to be the leading professionals in the measurement and management of risk-it is vital that we offer a complete actuarial education to our candidates and our members. I hope that you are as excited as I about this critical step to making that vision a reality.

Jim Mange, FSA, MAAA, is president of Health Reinsurance Management Partnership. He can be contacted at imange@hrmp.com.



Do you know which organization provides education to millions of Americans



Disciplinary Notice

NOTICE OF DISCIPLINARY DETERMINATION

On December 13, 2011, the Society of Actuaries convened a Discipline Committee to review a matter referred by the Actuarial Board for Counseling and Discipline ("ABCD"). The Discipline Committee determined that Robert D.J. Scheiring, FSA, should be expelled from the Society of Actuaries for a material violation of Precept 1 of the Code of Professional Conduct.

The disciplinary matter related to conduct by Mr. Scheiring that reflected adversely on the actuarial profession. Mr. Scheiring was arrested in 2009 on charges involving the possession and distribution of certain materials in violation of federal law. In June 2010, Mr. Scheiring pled guilty to two counts of an indictment, and he is now serving a sentence for those crimes.

PRECEPT 1 states, "An Actuary shall act honestly, with integrity and competence, and in a manner to fulfill the profession's responsibility to the public and to uphold the reputation of the actuarial profession." This Precept is further elaborated in Annotation 1-4, which states:

An Actuary shall not engage in any professional conduct involving dishonesty, fraud, deceit, or misrepresentation or commit any act that reflects adversely on the actuarial profession. (Emphasis added.)

Mr. Scheiring violated Precept 1 by engaging in conduct that violated the law, and the nature of which conduct reflects adversely on and damages the reputation of the actuarial profession.

All members of the SOA are reminded of their responsibility to follow the Code of Professional Conduct. Members are encouraged to maintain familiarity with the Code and its precepts by regular review and/or participation in webcasts or professionalism sessions offered at various SOA and other actuarial conferences.



Actuary

