



The Actuarial Review

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From the President



Who Runs The CAS?

by Alice H.
Gannon

Steve Lehmann handed me the gavel at the conclusion of the CAS's annual meeting in San Francisco in November and I became the president of the CAS. Any way I look at it, serving as the president of the Casualty Actuarial Society is a major event in my life. It is a great honor. It is a major commitment of my time and energy. It is a significant responsibility and a great opportunity to learn and experience many new things. Yes, serving as the president of the CAS is definitely a major event for me personally and I am both grateful for the opportunity and a little anxious about doing a good job.

It is not, however, a major event for the CAS.

The president of the CAS does have an important role in CAS activities. The president oversees the development and achievement of a long list of operational goals for the CAS that represent the majority of activities that will take place during the year. The president represents the CAS in many different situations and the president's actions help shape how others view the CAS and interact with the organization. The president sometimes must quickly make important decisions about issues when the time frame does

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Top Actuarial Stories of 1999

by Robert F. Conger and Michael A. Walters

The repeal of the Glass-Steagall Act was far and away the most significant 1999 news story in its implications for casualty actuaries, according to the results of our annual survey of CAS leaders. Other fundamental changes in the way insurers conduct business—including selling insurance over the Internet, securitizing catastrophe risks, and commercial lines deregulation in many states—also were identified as significant 1999 trends for casualty actuaries.

On the importance of Glass-Steagall repeal, respondents noted that new players, such as banks entering the insurance business, may become major users of actuarial expertise, but may bring other types of quantitative analysts into the conventional domain of actuaries. Further challenges include traditional employers and clients finding new ways to market, package, and distribute insurance, as insurers become active in new types of business.

This year, virtually every respondent listed Glass-Steagall repeal as a top ten story, more than half naming it the number one story. The statutory dismantling of decades-

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1999 Annual Meeting Highlights

San Francisco, Ca.—More than 900 people, including 667 CAS members, attended the CAS Annual Meeting held here November 14-17, 1999, making this gathering one of the most highly attended CAS meetings. **Steven G. Lehmann**, 1999 CAS president, presided over the meeting, which featured several outstanding sessions ranging from Internet and e-commerce exposure to commercial lines deregulation. Nine *Proceedings* papers were also presented.

At the annual business session, held Monday, November 15, the CAS honored 51 new Associates who were inducted as members and 124 new Fellows (see photos, pages 10-12). Former CAS president (1971), **LeRoy J. Simon**, addressed the new members relating that it was "easier to become an actuary than to be one" (see Simon's address, page 13).

The CAS also honored award winners during the business session. **John H. Muetterties** was awarded the Matthew Rodermund Service Award for his significant volunteer contributions to the actuarial pro-



Steve Lehmann presents Alice Gannon with the CAS presidential gavel.

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A Perfect Expression of Volunteerism

by C. K. "Stan" Khury

Once every five years, the past presidents of the CAS spend an evening together. This year marked the 85th anniversary of the CAS and, on schedule, the past presidents spent an evening together in San Francisco in conjunction with the CAS Annual Meeting. During such a gathering, it is virtually impossible not to reflect on where the CAS has been and where the CAS is going. The 1999 edition was no exception. Looking back on just the thirty-five years since I became a member it seems that the CAS has changed a great deal and yet it also seems that the CAS has changed very little.

In many respects the CAS is much larger. The number of Fellows has grown by a factor of ten. The range and number of the CAS publications have grown a great deal. The influence of the CAS in the international actuarial community has grown—

"...while the CAS is thriving, its main identity has changed very little except, perhaps, it has gotten stronger. Why is that? Could it be the volunteer culture that makes all of this possible?"

in part, I am sure, because it is the only actuarial society in the world totally dedicated to the contingencies arising from property and casualty risk. The number and range of CAS meetings have grown. And the infrastructure of the CAS, both professionally and administratively, has also grown. Thus, if size is any indication of prosperity of a community, one can safely say that the CAS has prospered.

Yet the CAS seems to have changed very little. The CAS, in its purest essence, remains a community of volunteers (which we often mistakenly refer to as an "organization" of volunteers). Volunteerism is still the principal driving energy that courses

through the system and keeps the CAS vital and relevant. The administrative infrastructure of the CAS continues to be subordinate to the professional infrastructure—and this feature of the CAS has been jealously guarded over the years. The institution has remained subordinate to the individual practicing actuary and the ideas that drive the science that occupies our attention.

Thus, while the CAS is thriving, its main identity has changed very little except, perhaps, it has gotten stronger. Why is that? Could it be the volunteer culture that makes all of this possible? Over the years, a substantial portion of the CAS has been directly involved in its affairs—no matter the subject. As a matter of fact as the number of Fellows has grown, the proportion of Fellows involved in the affairs of the CAS has increased. This is counterintuitive. But it is a fact! Even a quick glance at the *Yearbook* suggests the scope of the involvement of the membership with the affairs of the CAS. The *Yearbook*, as of this writing, lists 48 percent of the Fellows as engaged in service in one capacity or another—and this does not necessarily include those who serve on panels, write papers, participate in the CAS Regional Affiliates' governance, and otherwise participate in activities that are not listed. This is a vital energy that will always serve the community well as it has no



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Las Vegas To Host CAS Spring Meeting

by James L. Dornfeld

Las Vegas, Nevada is the site of the CAS 2000 Spring Meeting, which will be held May 7-10 at the Bellagio. The featured speaker, Dr. James Canton, is one of the nation's leading futurists, a digital entrepreneur, and an author. A guest host on *CNN Financial News Network*, Canton reports on the latest technology, trends, and emerging cyberculture that are reshaping business and society. He is noted for his accurate forecasts on high-tech trends that have dramatic impact on business and society. Dr. Canton is the author of *Technofutures: How Leading Edge Technology Will Transform Business in the 21st Century*.

Ratemaking Reminder

There is still time to register for the CAS 2000 Ratemaking Seminar, which will be held March 9-10 at the historic Hotel del Coronado near San Diego. Walter Hays of the American Society of Civil Engineers will present a general session on managing earthquake risks in the 21st century. A second general session will feature a mock rate hearing, an educational but humorous take on the regulatory process.

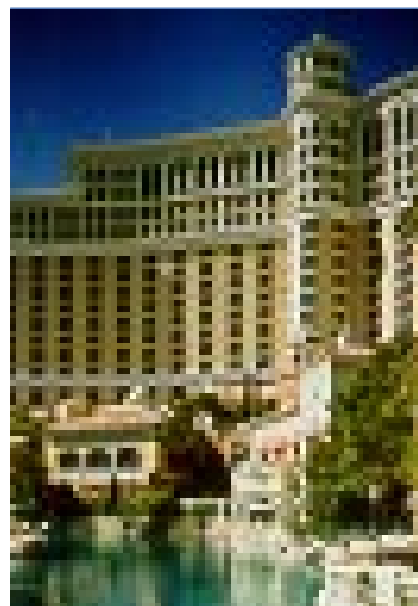
New sessions will address ratemaking for auto and professional liability, management of catastrophe risk information, and data quality for mergers and acquisitions. Other new sessions will focus on ratemaking implications of health care delivery; emerging risks; capital allocation and profit; securitization; and DFA applications in primary insurance, reinsurance pricing and international ratemaking.

Log on to the CAS Web Site at www.casact.org/coneduc/ratesem/rate2000/index.htm for more information. ■

Three General Sessions are being planned. "Enterprise Risk Management" will look at various approaches to managing risk from a holistic view in order to develop optimal financial and strategic objectives for the organization. A second general session, "The Future," will focus on the actuarial profession and its challenges posed by anticipated changes in the insurance industry. The final session, "The Outsider's View of the Actuary," will provide insight into how casualty actuaries are viewed by management and those in related financial professions and will discuss general business skills necessary for success in areas of nontraditional actuarial practice.

The Spring Meeting will present several call papers on the topic of "Insurance in the Next Century," covering topics related to technology, international issues, securitization, reinsurance, product development, strategic planning, alternative markets, and more. The Michelbacher Prize will be awarded to the best paper submitted in response to this call.

Concurrent sessions being planned will include topics such as credit scoring and fraud models, Regional Affiliates and the needs of future members, the American Academy of Actuaries Working Group on Catastrophes, financial services deregulation, emerging data issues, actuaries in nontradi-



Las Vegas' Bellagio Hotel.

tional roles, future of underwriting cycle, quality of the actuarial work product, and more. Further, there will be a limited attendance workshop held all day on Tuesday, focusing on developing general business skills.

An optional golf tournament will be held on Tuesday afternoon. On Tuesday evening members and guests are invited to a Las Vegas show.

More detailed information on the CAS 2000 Spring Meeting will soon be mailed to members. ■

Bühlmann Receives Anderson Award

The prestigious James C.H. Anderson Memorial Award was presented to Hans Bühlmann at the Society of Actuaries 50th Anniversary meeting in San Francisco, on October 19, 1999. The award recognizes individuals for their outstanding contribution to the actuarial profession during the last 50 years.

Bühlmann, a scholar and a leader, wrote his now classic book, *Mathematical Methods in Risk Theory* (1970), which became fundamental to the study of non-life actuarial theory. His theoretical framework, the "Bühlmann model" and the subsequent "Bühlmann-Straub model," are used worldwide. Bühlmann's accomplishments also include serving as president of ETH-Zurich University and holding four honorary doctorates from universities around the world. ■

The ABCD's Commitment to High Standards

Note: An edited version of the following letter was published November 26, 1999 by The Wall Street Journal. The letter, from Henry K. Knowlton, vice chairperson of the Actuarial Board of Counseling and Discipline (ABCD), responded to the newspaper's October 29 article reporting that the Labor Department planned to examine actuarial firms' role in helping employers convert to cash balance pension plans from traditional plans. The article reported that from its 1992 inception through 1998, the ABCD had disciplined "only" seven actuaries.

Dear Sir:

In her October 29 article in *The Wall Street Journal*, Ellen Schultz made reference to the Actuarial Board for

"Schultz's article fails to report that...the ABCD has considered more than 150 cases that could have resulted in disciplinary action."

Counseling and Discipline. As a member and former chairperson of the ABCD, I was more than disappointed by the dismissive tone of Ms. Schultz's comments.

The ABCD is a volunteer board that takes its responsibilities to the actuarial profession and the public very seriously. The number of actuaries who have been disciplined may seem relatively small in the abstract, but it must be remembered that the actuarial profession itself is minuscule compared to other professions. There are fewer than 18,000 actuaries in the entire United States. By contrast, there are more than 40,000 lawyers admitted to practice law in the District of Columbia alone.

Ms. Schultz's article fails to report that, from its inception, the ABCD has

considered more than 150 cases that could have resulted in disciplinary action. Where the complaints were without merit, the ABCD dismissed them. In many cases, however, the ABCD offered specific guidance directing actuaries to improve their practices. Ms. Schultz also ignores the more than 100 instances where conscientious actuaries have voluntarily contacted the ABCD requesting guidance on how to deal with thorny professional issues.

The ABCD is committed to maintaining the high standards of conduct, practice, and qualification of the actuarial profession. I would urge Ms. Schultz not to be so quick to dismiss the valuable service that the ABCD provides to the actuarial profession and the public.

Sincerely,
Henry K. Knowlton
Vice Chairperson, Actuarial Board for Counseling and Discipline

Election Headline is Inaccurate

Dear Editor:

I'm sorry to be the one to tell you that your lead headline for this issue (*The Actuarial Review*, November 1999) is just plain wrong. The president of the CAS is not elected but assumes the office at the end of the term of his/her predecessor (see page 226 of the 1999 *Yearbook*-Article IV, Sec-

"The president...is not elected but assumes the office at the end of the term of his/her predecessor...."

tion 2). The last president of the CAS to be elected was LeRoy Simon in 1971. As Alice Gannon now knows I was the president-elect during his term and succeeded him without being elected. You can verify this by reference to page 46 of the 1974 *Yearbook*, which is contained in Volume LX

(1973) of the *Proceedings*.

You may be unaware that I have recently called this to the attention of Alice Gannon and she has informed me that the next *Yearbook* will set this matter straight. You can help by printing a black-letter retraction in a prominent place in your next issue. Please!

Charles C. Hewitt Jr., FCAS

Editor's Note: The Actuarial Review staff thanks Mr. Hewitt for his input. We stand corrected.

And Finally....

Dear Editor:

I received my copies of the August and November *Actuarial Review* just a couple days ago, and there were at least two items in the August issue that I feel I can comment on.

The piece on Bob Bailey's receiving the Robert J. Myers Public Service award from the American Academy of Actuaries did not mention, in the list of all his other accomplishments, that in 1993 the CAS awarded Bob the Matthew Rodermund service award. The creation of this award by the CAS preceded the Academy award by some years, and Bob got the award for the same reasons that he got the Academy award. He deserved it and it should not be overlooked.

Also in the August issue was a portion of Paul Liscord's column in the October 1974 issue, with a note that there were only three issues of *The Actuarial Review* in 1974. The reason why there were only three issues in 1974 is that *The Actuarial Review* was founded in 1974, and there was simply not enough time for four issues.

The August issue contains an article headed "What Is an Actuary?" It reminded me that when I first came to Medford Leas, a retirement community, in 1982, I was identified as an actuary, and other residents were curious about what an actuary is. So I wrote something for the Medford Leas newsletter, and a copy of it is enclosed. Do with it what you will.

Matthew Rodermund, FCAS

Actuarial Review Editor Emeritus

Editor's Note: See Mr. Rodermund's article on page 20. ■

Top Stories of 1999

From page 1

old bank assurance barriers is expected to add momentum to other important trends identified in the survey, such as Internet sales and the changing ownership structure through mergers and acquisitions.

The growth of the Internet, including the launching of various new Internet sites to market insurance, rose to a second-place ranking in this year's

survey, up from fourth place a year ago. The Internet opens the insurance market to new participants and new products, all needing actuarial support. The pace of Internet business, and the prospect of real-time information collection and premium rating, also require that actuaries develop increasingly nimble pricing tools.

A more traditional story, the deterioration of underwriting results, was rated third most important in 1999.

This deterioration increases the need for additional actuarial analysis, but may also demand that the profession find ways to strengthen the effectiveness of the technical methodologies and communication of actuarial results in the areas of pricing and reserving. The increase in importance of this story (from 11th last year) reflects the increasing duration and severity of unprofitable underwriting results.

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1999's Top Stories for Casualty Actuaries

How They Ranked and Why

Rank	News Story	Actuarial Significance	Sum	# Voting	1st Place Votes
1.	Federal legislation—Repeal of Glass-Steagall	New players, and new markets and products for insurers	471	53	31
2.	Various Internet sites launched to sell insurance	Pricing new products; need for nimble pricing	355	47	9
3.	Insurer U/W results deteriorate; some take reserve hit	Challenges to actuarial techniques and communications	295	47	6
4.	Insurers securitize more catastrophe risks; securitization vehicles launched	Need for actuarial creativity, research, and analysis	219	43	0
5.	State Farm loses class action case on non-OEM auto repair parts	Effect on auto pricing; potential new product options	214	37	1
6.	Merger activity continues, although at lesser pace than 1998	Involvement in due diligence; effect on markets and jobs	190	32	1
7.	Commercial lines deregulation in many states	Actuaries needed to determine appropriate pricing	148	35	0
8.	Insurance products cover equities and catastrophe; bottom line coverages closer to reality	Actuarial involvement in product design, pricing, evaluation	146	29	0
9.	Insurers announce large layoffs	Actuarial jobs affected	114	22	1
10.	Unicover blows up; scrutiny of life/health Workers Compensation reinsurance	Participants (P/C and L/H) need help; may change market cycle	93	22	1
10.	Progressive tests per-mile Texas auto rating using satellite	New rating variables demand new actuarial techniques	93	20	0
12.	Insurance products launched to cover Internet risks	New risks to be analyzed and priced	87	20	1
13.	Codification of statutory accounting principles	Actuaries must know requirements and produce work product	80	15	0
14.	Insurers use multi-distribution channels	Actuaries must price and track the products and channels	71	17	0
15.	Y2K liability/coverage issues	Unique liability and coverage issues; potential data impact	62	19	1
16.	Internet use in insurer operations (claims, communications, virtual meetings)	Impact on expense ratio requires review, analysis; effects on types of data available and speed	49	7	1
17.	Before federal legislation, banks/insurers/agents cross boundaries	New players in insurance; new roles and markets for insurers	45	6	2
18.	HMOs hit for coverage decisions	Impact on product pricing; new risks to insure	34	13	0
19.	Alternative market maintains share in spite of soft market	Analysis needed; job opportunities; spread of profession	33	9	0
20.	DFA: transition from theory to practice	DFA now being used to make real decisions	27	5	0

Top Stories of 1999

From page 5

A related story, the deregulation of commercial lines in many states, was ranked seventh most important this year. With fewer regulatory constraints on pricing, actuaries must be increasingly vigilant in monitoring competitive pricing.

Two other top ten stories focused on the interrelationship of traditional property/casualty hazard risks and the capital market. Securitization of catastrophe risk through individual or newly created multi-participant vehicles was the fourth most important story overall. The launch of insurance products to cover equity returns in conjunction with hazard risks, creating "bottom line" protection for insureds, was eighth. Both offer new arenas for actuarial research, product design, and pricing.

ing.

The fifth-ranked story was the class action case against State Farm's use of competitive, nonoriginal equipment, repair parts. The likely resulting change in automobile claim and repair practices will have an impact on the pricing of auto coverages, and may create an opportunity for new alternative insurance product choices.

Last year's top-rated story, the consolidation of the property/casualty industry through mergers and acquisitions, fell to number six this year, paralleling the lesser pace of M&A activity during 1999. The announcement of large layoffs by insurers as they fight to meet current competitive pressures, was rated as the ninth most important story, on potential effects for actuarial jobs.

Two diverse stories round out this year's list, with a tie for tenth place.

Progressive's test of a per-mile auto policy in Texas, using satellite technology, is seen as creating a need for new actuarial classification and pricing techniques. And, both primary insurers and reinsurers will require actuarial support in the aftermath of the Unicover blow-up, the related scrutiny of life/health reinsurance of workers compensation carriers, and the potential price and market shake-out.

As in prior years, this year's candidate stories were culled from the trade press to be externally oriented, and not intended to review CAS internal actions. In the first round of the survey, participants drawn from the Board, Executive Council, committee chairs, and past presidents narrowed and consolidated an initial list of 67 potential stories. The first round of this Delphi study also highlighted reasons for number one selections by various voters. The second round invited voters to review their initial selections. The final scores were tallied using the NCAA sports polling methods (10 points for first place down to 1 point for tenth place).

Continuing this year are the prizes for the best predictors of the final consensus of all participants. **Dale Porfilio** won the Insight Award because the final Top Ten consensus came closest to his original picks, with weighted scoring.

Paul O'Connell finished a close second in the Insight Award category, and finished on top for the Consistency Award. Paul's original ten picks came closest to the final consensus voting, with unweighted scoring. **Jeffrey Dollinger, David Miller, and Gary Dean** were in a dead heat for second prize in this category.

Finally, the overall Bellwether Award goes to **Paul O'Connell**, who had the best combined score in both of the above categories.

Thanks to all the actuaries who participated in this survey, especially given the tight turnaround required as company clocks ticked towards Y2K. This result also serves as an important input to the Long Range Planning Committee on potential future directions of the actuarial practice. ■

Session Highlights CAS Volunteer Opportunities

San Francisco, Ca.—Drawing on the strong culture of volunteerism in the CAS and with hopes of getting even more members involved, the Committee on Volunteer Resources (COVR) conducted a special concurrent session entitled, "Volunteering Within the CAS—Working to Advance the Profession." Held Tuesday, November 16, 1999, during the CAS Annual Meeting, the session featured a panel discussing the many volunteer opportunities CAS offers to members.

Moderator and COVR member, **Roger Schultz**, explained how COVR first started as a task force in 1997 to examine the CAS volunteer process. COVR determined that more than 40 percent of CAS Fellows volunteer in some way every year. Associates are also very involved, with more than 100 presently serving as volunteers. Schultz pronounced these figures as "rare and nice" statistics.

The session featured a panel of CAS volunteers with a range of experience levels, from relatively new to veteran. First-time volunteer **Kristine Plickys** described her service as a member of the Examination Committee. Plickys touched on the workings of

the committee—structure, exam writing, and grading—and how much time she devoted to the committee's work. Being able to meet and work with CAS members from other companies was one of the greatest benefits of working on a committee,



Volunteers on volunteering: Session panelists are (from left to right) Nancy Braithwaite, Roger Schultz, Kristine Plickys, and Gary Shook.

the committee—structure, exam writing, and grading—and how much time she devoted to the committee's work. Being able to meet and work with CAS members from other companies was one of the greatest benefits of working on a committee,

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The Drama of Actuarial History

Society of Actuaries 50th Anniversary Monograph edited by James C. Hickman
(Society of Actuaries, 1999, \$45.00)

Reviewed by Sholom Feldblum

In 1999, the Society of Actuaries celebrated its 50th anniversary. As befits a learned body, the SOA issued a commemorative monograph with seven seminal articles in actuarial science from the *Transactions*. The large paperbound volume, with clear type on soft-toned pages, beckons the reader to step into the drama of actuarial history.

SOA actuaries, all of whom received the anniversary volume from the society, will gain from rereading the papers that set the direction of their science. Casualty actuaries who take the time to read it will gain double.

We seek to expand the borders of actuarial science, turning to financial economics and investment theory. SOA actuaries see a similar future for their own society. Yet a wall has risen between the two societies. We share mathematical foundations, we perform parallel functions, yet our sciences have diverged. We underwrite and price policies; we pay claims and set reserves. They also underwrite and price policies; they also pay claims and set reserves. We have no idea how they price their policies or set their reserves; they have no idea how we price our policies or set our reserves.

The Anderson Method

The seven papers in this volume signal turning points in actuarial thought. For instance, we measure insurance profitability by comparing the losses and expenses incurred in a given calendar year or policy year with the premiums earned in that year. In 1959, James Anderson realized the error in this perspective. The relevant business decision is the underwriting decision. The underwriting decision is judged by the present value of all future losses and expenses on the policy and on its renewals compared with the present value of present and future premiums

on that policy and its renewals. Anderson's paper entitled "Gross Premium Calculation and Profit Measurement for Nonparticipating Insurance" develops the required exhibits to measure the value of insurance underwriting.

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Anderson's paper changed the course of life insurance pricing. The SOA recognized his genius, and the paper was awarded the society's Triennial Prize for 1959-1961. (I first read this paper 12 years ago, and I replicated Anderson's method for personal auto premiums in a paper that received the 1996 CAS Dorweiler Prize.)

Casualty actuaries should not be content with reading a personal auto version of Anderson's method; they should read the original paper. Until now one had an excuse for sloth—it is hard to find a copy of the 1959 *Transactions*. Now that this paper has been republished in the SOA Anniversary volume, it behooves casualty pricing actuaries to master the Anderson pricing method.

Cumulative Antiselection Theory

Many years ago, casualty companies wrote most medical insurance in this country. Now SOA actuaries are the

experts in health insurance pricing. Some casualty actuaries think that they can price individual medical insurance equally well. After all, do not workers compensation, general liability, and automobile insurance all pay for medical losses?

Medical insurance pricing is unique, because of a powerful informational asymmetry and the resulting "antiselective" lapsation. Healthy insureds often let their policies expire as they age and premiums increase; unhealthy insureds do not fail to renew.

In 1982, William Blume developed his cumulative anti-selection theory to model the progress over time of a book of medical insurance business. He quantified the effects, and he showed pricing actuaries how to anticipate the results of mid-term rate increases that accelerate the antiselective lapsation. Blume's paper won the society's 1980-82 Triennial Prize.

For many years, the CAS has directed its Syllabus Committee to keep health insurance ratemaking on its exams, and year after year I would recommend to the committee to put Blume's seminal paper on the syllabus. This is a paper we should all read—both Fellows and students—and it is now accessible to us in the anniversary monograph.

Interest Rate Generators

In the past few years, both actuarial societies have turned to financial modeling and investment analysis, with seminars and new papers for actuaries and with restructured exams for students. An essential element of many models is the interest rate process; a good model should have a realistic interest rate generator.

Actuaries are well-versed in modeling. We model loss frequencies with Poisson distributions and loss severi-

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Report of the CEO Advisory Task Force

by Curtis Gary Dean, CAS Vice President-Administration

A CAS task force completed a series of interviews with CEOs and other insurance industry leaders during the summer of 1999. The mission of the task force was to identify the needs of potential customers/employers of actuarial services and to explore how actuaries might best meet those needs. The members of the task force were **Mavis A. Walters** (Chair), **Curtis Gary Dean** (Vice Chair), **Linda L. Bell**, **Jerome A. Degerness**, **David P. Flynn**, **Alice H. Gannon**, **Steven G. Lehmann**, **Stephen P. Lowe**, and **Michael A. Walters**. The report of the CEO Advisory Task Force was presented to the CAS Board of Directors on November 14. The executive summary from the report follows.

Executive Summary

In recognition of the rapidly changing business environment and realizing that the role of actuaries is expanding from the traditional ratemaking and reserving activities, the CAS Board of Directors established a special task force to help plan for the future. The mission of the task force was to identify the needs of potential customers/employers of actuarial services and to explore how actuaries might best meet those needs.

Fourteen P/C insurance industry leaders—CEOs or practice leaders from insurers, reinsurers, consulting firms, and brokers—were interviewed by task force members.

The interviews began by asking the leaders to identify the strategic issues facing the industry and any particular challenges facing the CEOs' organizations. This led to a discussion about the skills needed to address these issues and challenges, and the role of actuaries in the organizations. Other topics that followed included the importance of professionalism, competing professions, the quality and relevance of actuarial skills, and what skills actuaries need to develop.

Consolidation, convergence, and globalization were identified repeat-

edly as major strategic issues of concern. There is uncertainty about where the financial services industry is going and who will dominate. Concerns were expressed about the continuing changes in risk management: self-insurance, integrated risk management solutions, securitization, and new products. Competition from within and from outside the industry was mentioned as a major challenge. Accord-

“...some actuaries are too narrow and too technical...they need to develop general business skills and a broader business perspective.”

ing to the CEOs, there is a lot of capital chasing few growth opportunities. Consequently, it is crucial to create the right products and then have an effective means to distribute them to customers.

The CEOs concluded that a combination of people and a variety of skills are needed to meet the challenges. Among the skills or qualities mentioned were the abilities to learn continuously and to produce results, as well as curiosity, people skills, creativity, enthusiasm and passion, management skills, general business skills, and business sense.

Of the fourteen leaders interviewed, most believed that actuaries were important contributors to their organizations. In fact, several said that actuaries were vital and that actuaries were working throughout their organizations. Actuarial skills, particularly their analytical and technical/mathematical skills, are valuable and difficult to find in other professionals.

A common criticism of actuaries

from the CEOs, however was that some actuaries are too narrow and too technical and that they need to develop general business skills and a broader business perspective.

Three who were interviewed have serious reservations about actuarial contributions. One said that actuaries at his company are used only in reserve analysis and are used there only because their certification is important to outside parties. He said that actuaries do not have an interest in running a business and therefore are of little value in his organization. Besides that they are expensive. Another said that he is not getting help from actuaries on his most important business issues. There may be too much comfort for actuaries to stay within their own “narrow” discipline. He said, “Actuaries are pursuing greater precision in areas of decreasing relevance.” A third CEO stated that actuarial tools were not adequate to handle the demands of the fast-paced, competitive world in which we now live.

There were a number of suggestions on the things that actuaries or the actuarial profession can do to enhance their value, including:

- Develop general business skills and a broader business perspective
- Learn to operate under uncertainty and learn how to take business risks
- Generate creative ideas or solutions
- Grow—business people must grow and mature beyond their technical training
- Improve modeling techniques: (1) develop models that do not require large bodies of historical data, and (2) incorporate current information and trends into models
- Provide quicker, more responsive solutions
- Improve teamwork skills with non-actuaries

The consensus was that professionalism, a code of conduct, and standards of practice are important. In fact, one CEO stated that these are absolutely

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...Of Cabbages and Kings....

by Kendra M. Felisky-Watson

After the last issue of *The Actuarial Review* came out, I decided to take an informal poll of U.K. actuaries since I thought they might have a view on the matter of Mutual Recognition. The response was interesting though not unpredictable.

Generally, Fellows of the Institute or Faculty recognize that the CAS qualification involves specialized training in property/casualty insurance. While they would like to get a “free” FCAS designation without taking any exams, they believe that it would be unfair since the non-life training of the FIAs/FFAs is much less rigorous. Similarly, they believe that it should not be possible for a FCAS to come to the U.K. and get a FIA since people would assume that this person could then calculate the appraisal value of a life company or perform a pension valuation.

Comments also ranged from:

“The CAS exams are regarded as excellent—wide ranging and challenging.”

“[It is] Difficult to compare the two exams for difficulty since they are testing knowledge and ability in different ways.”

“If you don’t know which exams they took, then you don’t know how qualified they are to perform certain functions.”

The general consensus over here was that Mutual Recognition should not automatically be granted. Instead, a few extra exams should be required. For FIAs wanting to be FCASs, they should be required to take some of the CAS exams in order to boost their knowledge of property/casualty insurance. For FCASs wanting to be FIAs, they should be required to take some exams in life insurance and pensions to be on an equivalent knowledge base.

The other problem is that Mutual Recognition only seems to go one way. The CAS designation is highly re-

spected in London and the rest of Europe. CAS actuaries are in high demand. Also, FCASs can already sign the Lloyd’s reserving opinions. There is no reason for FCASs to want to become FIAs, though many people see a reason for FIAs to want to become FCASs.

Conference

The Faculty and Institute of Actuaries held their General Insurance Convention at the Grand Hotel in Brighton, 25 years since the first such convention was held in Norwich. The numbers attending have increased from around 30 to nearly 400, reflecting the vast increase in the involvement in actuaries in general insurance over that period.

Over the three days of the conference, ten new research papers were presented to the whole conference as well as lectures by a variety of guest speakers. In addition, more than fifty workshops were run on a wide range of topics for audiences of between 10 and 50. This year the General Insurance Research Organising Committee (GIRO) convention has branched out from its traditional emphasis on technical papers to cover wider corporate finance, professional, and public interest issues. This development reflects the greater maturity of actuarial involvement across all areas of general insurance, both at Lloyd’s and in the company market.

Among the themes covered by the main plenary sessions were developments in the motor market, reinsurance and corporate finance, and reserving. There was also a session on professional matters, which included a lively debate on public interest issues within general insurance and the role of the actuarial profession in their resolution.

The quality of the papers presented to the GIRO conference was agreed to be of a very high standard, and many of them will be used as a good reference source for many years to come. A

copy of the papers can be obtained from the Institute of Actuaries.

A variety of guest speakers were invited to the conference. **Thomas Mack**, of Munich Re, discussed the appropriateness of some of the reserving techniques currently in use. Tom Bolt, from the Berkshire Hathaway Group, gave an interesting comparison of the changes in the reinsurance market over the last 10 years, and Michael Tillett QC gave his views of the likely impact of the Woolf reforms from the legal perspective.

One of the most successful sessions was a “mock acquisition exercise,” held on the last day, where delegates used electronic voting equipment to value an insurance company that was up for sale as various pieces of information were made available.

An informal opinion poll was also conducted with hand-held polling devices. There was a strong difference of opinion on the likely insurance cost of the year 2000 claims. While the majority felt that costs would not be great, a significant minority believed that the cost could be extremely high. Much debate took place in the final session as to how best to reserve for potential claims, particularly given the uncertainty over whether companies will be able to reclaim costs of remedial work. There was a strong view that it was all a bunch of nothing hyped up by information technology consultants who screwed it up in the first place. I guess by the time this article comes out, we will have a better idea of the potential exposure.

The event closed, as is now traditional, with the convention dinner on Friday evening where magicians provided entertainment. The after dinner speaker was Mary Spillane of Color Me Beautiful who gave a brilliant talk on how actuaries could present themselves better. An image consultant at a conference of actuaries! What is this world coming to? ■

New Fellows Honored

New Fellows first row, from left: James B. Kahn, Robert J. Wallace, David Patrick Moore, **CAS President Steven G. Lehmann**, Patricia Cheryl White, Brian Tohru Suzuki, Michael D. Brannon, Ronald J. Herrig. **Second row, from left:** Christopher Ross Heim, Nathan Schwartz, Hiep T. Nguyen, Matthew C. Mosher, John T. Gleba, Sarah Krutov, David E. Heppen, Richard J. Babel. **Third row, from left:** Gary J. Ganci, Darrel W. Chvoy, Christopher J. Monsour, M. Charles Parsons, Gregory Hansen.



New Fellows first row, from left: Thomas P. Gibbons, James L. Nutting, Ann M. Bok, Denise R. Olson, **CAS President Steven G. Lehmann**, Cynthia A. Bentley, Luba O. Pesis, Jeffrey S. Trichon. **Second row, from left:** Mark B. Anderson, Lisa A. Bjorkman, Christopher Edward Olson, Martin S. Arnold, Michael A. Nori, James M. Kelly, Douglas W. McKenzie. **Third row, from left:** Yin Lawn, Karen L. Queen, David E. Marra, Michael Edward Doyle, Michael Boyd Masters, James D. Kunce, Paul W. Mills, Timothy Andrew Davis.



New Fellows first row, from left: Rimma Abian, Janet G. Lindstrom, Allison Michelle McManus, **CAS President Steven G. Lehmann**, Siu K. Li, Tracy A. Ryan, Donna M. Nadeau, Anthony E. Cappelletti. **Second row, from left:** Simon Kai-Yip Wong, Kai Lee Tse, Donald M. Gambardella, Kathleen Mary Quinn, Leslie Alan Vernon, Ethan David Allen, William R. Maag. **Third row, from left:** Adam M. Swartz, Jean-Pierre Gagnon, Roosevelt C. Mosley, Gary T. Ciardiello, Jay Matthew South, Scott T. Hallworth, P. Claude Lefebvre.



New Fellows admitted in November 1999 who are not pictured: Bryan C. Christman, Claudia Barry Cunniff, Jean A. DeSantis, Mary Ann Duchna-Savrin, Matthew E. Golec, David Thomas Groff, Michael B. Hawley, Mark J. Kaufman, Jean-Sebastien Lagarde, Lee C. Lloyd, Catherine A. Neufeld, David Anthony Ostrowski, Yves Raymond, David L. Ruhm, Bret Charles Shroyer, Matthew Robert Sondag, Benjamin A. Walden, Sheng H. Yu.

at 1999 CAS Annual Meeting



New Fellows first row, from left: James R. Merz, Jodi J. Healy, Dawn E. Elzinga, Randall S. Nordquist, **CAS President Steven G. Lehmann**, Noel M. Hehr, Angela Kaye Sparks, Brian K. Cox. **Second row, from left:** Jonathan Everett Blake, Thomas A. Huberty, Karen Barrett Daley, Bonnie C. Maxie, Christopher S. Downey, Vincent F. Yezzi, Kyle Jay Vrieze. **Third row, from left:** Brian L. Ingle, François L. Morissette, Suzanne E. Black, Jeffrey F. McCarty, Jay C. Gotelaere, Seth Andrew Ruff, Peter F. Drogan.



New Fellows first row, from left: Philippe Gosselin, Dom M. Tobey, Wendy L. Witmer, **CAS President Steven G. Lehmann**, Edward H. Wagner, Hany Rifai, Bethany L. Cass, Kevin A. Lee. **Second row, from left:** Teresa K. Paffenback, Jean-François Chalifoux, Rachel Dutil, David Leblanc-Simard, Denis Dubois, Michael C. Schmitz, Chad C. Karls. **Third row, from left:** Martin Carrier, Christopher William Cooney, Nitin Talwalkar, Charles Pare, Rajesh V. Sahasrabuddhe, William P. Ayres, John W. Rollins, Kurt S. Dickmann.

Annual Meeting

From page 1

fession. Muetterties, a Fellow since 1956, first began serving on CAS committees in 1964. Most notably, Muetterties served on the Distribution of Losses, Long Range Planning, and Professional Conduct Committees. He was a member of the Education and Examination Committee from 1965 to 1970, and a consultant to the committee from 1974 to 1985. Muetterties also was a director on the CAS Board from 1971 to 1973. Muetterties is the author of "Underwriting Profits Necessary to Keep Pace with the Increasing Premium Growth for Property/Casualty Companies," which was published in the 1979 *Discussion Paper Program*.

Stephen J. Mildenhall won the 1999 Woodward-Fondiller Prize for his

paper, "A Systematic Relationship Between Minimum Bias Methods and Generalized Linear Models." Mildenhall's paper is published in the 1998 edition of the *Proceedings* and can be found on the CAS Web Site at www.casact.org/coneduc/sprngmtg/99/pcas/index. The Woodward-Fondiller Prize is awarded to a Fellow or Associate who has attained his or her designation within the last five years.

Gary G. Venter was awarded the 1999 CAS Dorweiler Prize for his paper, "Testing the Assumption of Age to Age Factors." Venter's paper will be published in the 1999 edition of the *Proceedings* and can be found on the CAS Web Site at www.casact.org/pubs/proceed/proceed98/index.

After the business session, the au-



Steve Lehmann (left) presents John Muetterties with the Rodermund Service Award.

dience heard from Gloria Borger, contributing editor to *U.S. News and World Report* and a regular panelist on the PBS program *Washington Week in Re-*

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New Associates Honored at 1999 CAS Annual Meeting

New Associates first row, from left: Dean Michael Winters, Todd Bennett Glassman, Isabelle Gingras, Maureen Ann Boyle, **CAS President Steven G. Lehmann**, Ian John McCracken, Javanika Patel Weltig, Tony Francis Bloemer. **Second row, from left:** Saeeda Behbahany, Kathleen Marie Farrell, Richard James Engelhuber, Julie-Linda Laforce, Caleb M. Bonds, Michael William Starke, Kevin Paul McClanahan, Douglas Lawrence Dee. **Third row, from left:** Christian Menard, Penelope A. Bierbaum, Robert Andrew Grocock, David Lee Handschke, Stephen James Streff, Jeffrey S. Wood, Weishu Fan.



New Associates first row, from left: Josephine L.C. Tan, Brian Roscoe Coleman, Stephanie Ann Gould, Rosemary Gabriel Wickham, **CAS President Steven G. Lehmann**, Apryle Oswald Williams, Linda S. Klenk, Genevieve L. Allen. **Second row, from left:** Tina Shaw, Brendan Michael Leonard, Joshua Nathan Mandell, Karen Lerner Jiron, Rebecca N. Hai, Peter Scott Gordon, Jeremy James Brigham, James P. Lynch. **Third row, from left:** Shangjing Li, Delia E. Roberts, Philip M. Imm, Peter Victor Polanskyj, Aaron Michael Larson, Shawn Allan McKenzie, Kin Lun (Victor) Choi.

New Associates admitted in November 1999 who are not pictured: Michael D. Adams, Alan R. Clark, Jonathan Mark Deutsch, Richard A. Fuller, Rainer Germann, Robert C. Kane, Ravi Kumar, John B. Landkamer, Josephine Teruel Richardson, Marn Rivelle, Joseph Allen Smalley, David K. Steinhilber.

Annual Meeting

From page 11

view. Borger spoke about her beat as a political reporter, thoroughly entertaining the crowd with her political wit. Speaking about President Bill Clinton's seeming political invincibility, Borger quipped, "If Bill Clinton were the *Titanic* the iceberg would sink!"

Following the Monday morning activities, 1999 CAS President **Steven G. Lehmann** delivered a luncheon address to attendees. Lehmann focused his remarks on several trends in the business world including mergers and



Gary Venter (right), 1999 Dorweiler Prize winner, accepts his award from Gary Josephson (left).

acquisitions, competition with MBAs and financial engineers, emerging technology, and globalization.

Lehmann predicted a continual "blurring of lines" between insurance companies and organizations offering other financial services. "Many insurance products are already a mixture of traditional insurance and financial products," said Lehmann. "It remains to be seen who will come out on top in these mergers. If it's the banks it is critical to our future that the bankers and investment people become familiar with actuaries and what we can do for them."

Dealing with mergers and acquisitions and keeping up with technologi-

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It Is Easier To Become An Actuary

by LeRoy J. Simon

The following is LeRoy Simon's address to new members, which was given at the CAS Annual Meeting in San Francisco on November 15, 1999.

Heartiest congratulations—first to those accompanying persons who sacrificed and put up with so much while this morning's new Fellows and Associates struggled to reach this great day. All those who have been through it before you know and understand how difficult it is and of the appreciation you deserve. And, of course, a very warm welcome to you new Fellows and Associates on this milestone day. I hate to be the one that has to tell you this but—it is easier to become an actuary *than to be one*. More on that in a moment, but, as a corollary, learn to be good at accepting criticism, you'll get a lot of practice. The basic nature of our work is such that we must at times deliver messages that others do not want to hear; one of their defensive reactions is to blast the messenger. That does not change the quality of the message, however, so just be right in the first place, learn to accept criticism, and have faith in yourself.

When you entered the room this morning you stepped into an environment that was *created* for you. I am speaking in a broad sense of the environment of traditions, spirit, morals, ethics, and the knowledge base...all that has been built to create this Casualty Actuarial Society. You now stand on the shoulders of those who preceded you; what will you do with this opportunity? Thirty or forty years from now when you retire from active business pursuits, whether you like it or not, you will leave a legacy to those who follow—make it the best legacy you possibly can. You owe that to the CAS, you owe it to those who supported you on this path, but even more so, you owe it to yourself. Yes, it is easier to become an actuary than to be one.

You will have many successes over your actuarial career, so you must remind yourself that the greatest enemy

of future progress is past success. We are all comfortable with things that we know and understand. It's easy to *apply* a familiar tool to a new problem—much easier than analyzing the problem to see what tools would best apply and then designing a workable technique and carrying out the solution. Experience in a field makes you comfortable—you know the tool to use even before the problem is completely formulated. On the contrary, you must be willing to turn things on their head and look at them in a new light. You must strive to make change a partner, not an enemy; new input an

**“...strive to make
change a partner,
not an enemy...”**

accomplice, not a rival. And above all, you must force yourself to completely, carefully, thoroughly define the problem without jumping to the method of solution before you have a full grasp of the situation. The tools you have learned through the education process have brought you to today and will guide you through your early years as professionals. Be ready to discard them when improvements come along. Yes, *it is* far easier to become an actuary than to be one.

Forty-five years ago today I became a Fellow and the papers presented to the Annual Meeting of the CAS included two on *Workmen's* Compensation, two papers on health insurance, one on the boiler and machinery experience rating plan and an elementary one on fire insurance ratemaking. Now look at the program for this meeting: securitization of catastrophe exposures, computer technology, complex models, financial services, discounted cash flow.

There is no secret about how we got



Steve Lehmann (left) greets LeRoy Simon.

from the papers of 45 years ago to the presentations of today—CHANGE. And the only way to cope with such dramatic change over the course of your actuarial career is continuing education and continuous adjustment to the new environment. You have to go to a museum today to see a punched card which was the standard for data processing in 1954. When you get back to the office, look around and you'll see the museum pieces of the future and they'll be in those museums before you retire. Just make sure your actuarial expertise is not at a 1999 level because it is far easier to become an actuary than to be one....

But then, that's why we have actuaries like you in the CAS. Your median age is 31. You will be in the forefront at the 2014 celebration of the 100th anniversary of the founding of the Casualty Actuarial Society. You're young, bright, responsible individuals, ready to challenge the world and proud to be a member of the Casualty Actuarial Society. Keep your pride of today throughout your entire career....

You are the last CAS graduating class of the 20th century—but let's keep it in perspective—50 years and 50 days from today, you will still be actuaries but you will be closer to the start of the 22nd century than you will be to the year 2000. Good luck. Now that you've done the easier part and *become* an actuary, get out there and do the rest of the job—*be* one. I'll be watching you because, in some small way, you're my class of '99. ■

No Millennium Headlines

By Walter C. Wright

One of the pleasures of editing *The Actuarial Review*, or sometimes a major pain, is the opportunity to determine the “style” of the language that we use. Several years ago we had the great excitement of deleting the apostrophe in “workers compensation.” More recently we struggled with “E-mail” versus “e-mail.” With this issue we must state our position on the word “millennium” or, more properly, on when the old one ends and the new one begins.

For the past few months newspaper and magazine headlines have been trumpeting the start of the new millennium. But not the *AR*—at least not until next year, when the new millennium really begins.

Some readers may think that our editorial policy is picky, nerdy, and stereotypically actuarial. That we should get on the good-times band-

wagon, go with the flow, relax and enjoy the celebrations. After all, they may argue, if *The New York Times* refers to the year 2000 as the start of the new millennium, who are we to differ?

Well, we answer, the *AR* has always had high standards and *The New York Times Manual of Style and Usage* is one of the shrines at which we worship. *The New York Times* has bowed to the pressure of popular usage regarding the “millennium,” as stated in their recently revised *Manual of Style and Usage*. However, there is no reason for the *AR* to follow suit—the *AR* certainly should not be a follower when it comes to numbers. We’re the numbers guys. Just because *The New York Times* once had an article in which Supreme Court Justice Scalia commented that 1 divided by 0 is infinity, that doesn’t make it right.

So, we choose to be technically cor-

rect regarding the term “millennium.” We celebrated when the year 2000 rolled in, but this was because we got excited by all the zeros, not because it was the start of the new millennium. We’ll be able to celebrate wildly (at least from an actuarial perspective) again next year, at the real start of the new millennium. This shows that being technically correct does have its rewards.

We may eventually adopt the currently incorrect definition of millennium, because the meanings of words do change over time. In fact, *Webster’s* identifies a somewhat obscure meaning of “millennium”: any period of great happiness, peace, and prosperity. So, although refusing to take part in the millennium frenzy, we do invoke this old meaning of the word in order to wish the CAS and all its members a long millennium. ■

Volunteers

From page 6

according to Plickys.

Gary Shook, president of the Casualty Actuaries of the Mid-Atlantic Region, described many noncommittee volunteering opportunities available, such as participating in regional affiliate activities, writing papers, and presenting at meetings. Shook explained the role of regional affiliates in the CAS, and how one could become involved and make a contribution through these organizations.

Nancy Braithwaite, a long-time volunteer and committee chair, offered insights on benefits and frustrations of serving on a committee. Braithwaite first got involved when her employer encouraged her to join the Ratemaking Committee. From there she served on the Examination and Syllabus Committees, eventually becoming the Syllabus Committee chairperson.

Braithwaite outlined what volunteers could expect from serving on committees, in terms of time spent

working on projects and attending meetings. Speaking about the benefits of volunteering, Braithwaite emphasized that the ability to influence the various processes of the CAS, such as examinations and syllabus selections, as one of the greatest rewards of volunteering.

After a brief question and answer session, the session concluded with a drawing for door prizes for those in attendance.

For more information on how to become a CAS volunteer, contact Todd Rogers at the CAS Office. ■

Quarterly Review

From page 7

ties with Pareto distributions; why should interest rates be any different? Well, interest rates are much harder. When one fits a curve to loss frequencies, the result is never “wrong.” But an interest rate generator implicitly determines the present values of the universe of risk-free bonds. If the generator produces values that differ from

market values, the generator is in some sense “wrong,” since it is not arbitrage free.

Almost no simple generators are arbitrage free, and we do not know how best to structure our models. Many actuaries are intimidated by the complexity of the more sophisticated models. In 1992, James Tilley published his “Actuarial Layman’s Guide to Building Stochastic Interest Rate Generators.” (“Layman” may be misleading; Tilley pointedly says “actuarial layman,” who is an expert among laymen.) The paper won the society’s 1992-93 Annual Prize, and it is an excellent introduction for the serious actuary.

There are four other papers in the volume: Jenkins and Lew on annuitant mortality; Trowbridge on pension funding; Fraser, Miller, and Sternhell on variable life; and Stiefel on guaranteed investment contracts. The variety of topics, and the high quality of these papers, make the *SOA 50th Anniversary Monograph* a wonderful volume for casualty actuaries. ■

Fulfilling a Dream—One Park at a Time

by Brian D. Haney

Time is a scarce commodity—perhaps the scarcest. More and more, I find myself trying to carve out time to actually “live” my life. You scrounge an afternoon here, a weekend there, a week at the beach in summer...sometimes you piece together so little time that you wonder if you will, in all your years, fit as much life into your life as you did in college. Don’t you wish you could just take the summer off to see a baseball game in every major league park in the country? Well why don’t you? At least one other CAS member has!

Yup. A certain ACAS spent the summer of 1996 visiting every major league stadium in the U.S. and hitting some minor tourist attractions along the way...like the Grand Canyon and Mount Rushmore.

As embarrassing as it is for your beloved writer to think that his college years contained more life than the forward slope of his mortality curve, it is worse to think that there is an ACAS who fit more into 60 days than I will eke out of my 40s.

In fact, not only has he “been there” and “done that” but he wrote a book about it so he would remember not to do it again (a strategy he seems to share with Monica Lewinsky). Should you read the book, which will be published shortly, you will learn in much greater detail than I can present here about a trip that is fairly atypical. But more on that later.

The idea for a trip to every baseball stadium is in the ACAS’s own words “un-unique.” In fact he ran into others doing the same thing while at a Giants game. People do it with some frequency, although doing the whole trip in a car is something only an actuary would do.

In 60 days, this actuary went 23,000 miles by car—a ’94 Tercel nonetheless—and saw every park in the country, as well as four minor league parks.

The first pitch was on May 25 at Camden Yards, and the last was at San Francisco’s 3Com Park. In between, this ACAS camped out in the Black Hills of South Dakota and visited the annual motorcycle rally at Sturgis. He also saw Graceland, drove up

**“It simply
screams for a
*National Lampoon’s
Actuarial Vacation.*”**

California’s Pacific Coast Highway, and went to Yellowstone. Basically a life’s worth’s of vacations in 60 days—with baseball in between.

It simply screams for a *National Lampoon’s Actuarial Vacation*. Near as I can tell, no disaster befell him on his trip, other than his scientific evidence that for a long trip, no amount of tapes is enough, and that Shirley Jones in *Oklahoma!* is just as annoying the 18th time. Apparently, he reached pretty deep in his car cassette “rotation” on the long legs of the trip.

I asked him, “Why baseball?” He indicated that it was primarily because he is a baseball fanatic, but that this odyssey also allowed him to do a summer trip. I can see now that a trip to see a hockey game in every arena in North America might get a bit unpleasant. I suggested soccer might have been an alternative, but this ACAS thinks watching soccer is like watching paint dry...I forgave him his blasphemy.

Since this journey is something I’ll probably never do, I thought this ACAS might have some words of wisdom to impart to us, the less adventurous. He didn’t disappoint. In his own words (because they are better than any paraphrasing) he said: “Take risks and follow your fear; the things you’re scared of are usually the ones that

make you grow—and wear sunscreen.”

Having made an undeniably extraordinary journey, the ACAS is now settling down to more mundane matters, like a career and a family; in fact, he’s expecting his first child in January. If you want more details on his trip, they will be in his book published on fatbrain.com. Or you can ask **Claude Penland** yourself.

By the way, Claude is the internet manager at the recruiting firm, D.W. Simpson—even his job is non-actuarial.

We at *The Actuarial Review* congratulate Claude on his impending fatherhood and remind him that he owes us for leaving out his colorful comments about Cleveland fans! Oh...one last thing—Go Phillies!■

CAS Continuing Education Calendar

View the calendar online at
www.casact.org/coneduc/cal.htm.

February 28-29—Seminar on Managing Asset and Investment Risk, Los Angeles*

March 9-10—Seminar on Ratemaking, Hotel del Coronado, San Diego

April 10-11—Seminar on Valuation of Insurance Operations, Regal Riverfront Hotel, St. Louis

May 7-10—CAS Spring Meeting, Bellagio Hotel, Las Vegas

June TBD—Principles of Finance in Pricing Property & Casualty Insurance, Chicago*

June 15-16—Seminar on Reinsurance, Boston Marriott Copley Place, Boston

July 17-18—DFA Seminar, Marriott Marquis, New York City

June 19—U.K.-CAS Seminar, TBD, London, England

August TBD—Seminar on Reinsurance, New York City*

*Limited Attendance

From the President

From page 1

not allow for coordinated decision making. Choosing a president is an important decision. And how he or she does the job is important to the success of the CAS.

Nevertheless, the president's efforts, time, and decisions are but a tiny fraction of the total endeavors made by CAS volunteers. Hundreds of members spend tens of thousands of hours each year working to carry out the purposes of the CAS. There is no single responsibility of the president that is any more important than the responsibilities of the dozens of committee chairs, officers, and board members who represent the formal leadership of our organization. Important decision making is spread among those leaders, who sometimes act individually but often in conjunction with other CAS leaders or members. Major policy and strate-

"...no single responsibility of the president...is any more important than the responsibilities of the dozens of committee chairs, officers, and board members."

gic decisions are made by the Board of Directors based on input from the members, relevant committees, and the Executive Council. All key operational decisions are made by the Executive Council and those decisions also are based on input from the committees and, when appropriate, broader member input.

In fact, the CAS's governance structure was deliberately and wisely established by prior leaders to assure a broad spread of responsibility and authority. This is a major strength of the CAS. Its success, however, depends heavily on a strong volunteer culture. We are blessed that the CAS has a rich tradi-

tion of high involvement by a large percent of its members. While there have been times in the past when we have taken that for granted, we no longer do so. This past year, one of my responsibilities as president-elect was to serve as the chair of a new committee, the Committee on Volunteer Resources. It was a great experience and increased my awareness and appreciation of how important and valuable it will be to focus effort on maintaining our volunteer culture, especially in light of our rapid growth.

To quote the committee's charge, "The Committee on Volunteer Resources is responsible for reviewing volunteer involvement in the CAS and recommending ways to improve volunteer involvement and member satisfaction with CAS methods for utilizing volunteers."

This past year **Chris Carlson, Jerry Degerness, Russ Fisher, Roberta Garland, Ed Kuss, Kelly McKeethan, and Roger Schultz** did an excellent job of carrying out this charge. They made improvements to the participation survey and to the procedures for following up on the survey results. They sponsored an information booth and concurrent session at the November meeting to promote awareness of the wide variety of volunteer opportunities available (see story, page 6). They designed and implemented a "New Volunteer Mentor" program to assist members who want to get involved in CAS activities but aren't sure how to do so. They began developing new ways to recognize and reward the CAS's many volunteers. And of course, in fine actuarial style, they worked with the office staff to begin developing statistics for objectively tracking the level of volunteer involvement.

With support and assistance from many other CAS members, I hope the Committee on Volunteer Resources will help us maintain the strong volunteer culture we have enjoyed throughout the history of the CAS. I believe it is critical to our future to do so.

Who runs the CAS? Hundreds of volunteering CAS members run the CAS. As current CAS president, I am especially glad that that is the case. ■

Advisory Task Force

From page 8

essential to the actuarial profession and a major reason that he has so much respect for actuaries. But another said that although standards are important, actuaries need to be careful and not hide behind these standards instead of expanding their horizons and exper-

"A couple [CEOs] doubted the real value of codes of conduct."

tise. A couple doubted the real value of codes of conduct. Honesty and integrity are very important but cannot be taught or mandated by codes of conduct and standards.

The following professionals were named as possible competitors to actuaries: MBAs, economists, management consultants, mathematicians, statisticians, financial accountants, and investment/financial professionals. MBA training was described as providing broader business skills and one company uses MBAs instead of actuaries. But several companies said that they do not seek out MBAs for recruitment. Some commented that most MBAs do not have the math or statistical skills that actuaries have.

CAS members are encouraged to read the entire report and, in particular, the section titled "Actuarial Skills and Training." This section describes CEO opinions about "characteristics of the best actuaries" and lists skills and competencies that actuaries or the profession need to develop. The full report can be read or downloaded from the CAS Web Site at www.casact.org or a copy may be obtained by contacting the CAS office.

The Long Range Planning Committee is reviewing this report and will develop recommendations for the CAS Board of Directors on how the CAS should respond to the CEO input. As a result of this report, CAS committees currently are considering ways to include sessions on communications and general business skills in CAS annual meetings and seminars. ■

New Additions Enhance Web Site

The content of the CAS Web Site has continued to expand with recent additions to the Download Library and a new searchable database of links to other Web sites.

The Download Library now boasts 37 additional volumes of CAS publications, including 23 volumes of the *CAS Forum*, and 14 issues of the *CAS Discussion Paper Program*. Web site visitors can now download, view, and print actuarial research papers from the *Forum* dating back to 1987 and from the *Discussion Paper Program* dating back to 1982. The *Forum* has evolved to be primarily devoted to papers submitted in response to CAS research committees' calls for papers. The *Discussion Paper Program* contains papers submitted in response to an annual call for papers by the Committee on Continuing Education, which are generally presented at the CAS Spring Meeting.

Voicing his approval of the new Download Library additions, CAS Vice President-Administration Gary Dean explained, "An important advantage of accessing publications electronically is the savings in storage space. Three or four volumes of the *Forum* and *Discussion Papers* each year take up significant space on the bookshelf, and after several years, it can be difficult to find room. Office space is expensive and hard copy storage is a recurring cost." Commenting on the ease of use of the online publications, Dean said, "Electronic publications are readily accessible day or night for those with Internet connections. The download library is well organized and it's easy to find the publications. There is no danger that the copy that is needed has been borrowed or misplaced."

In addition to *Forums* and *Discussion Paper Programs*, the Web Site's virtual library, at www.casact.org/library/library.htm, includes *Proceedings*, papers accepted by the Committee on Review of Papers but not yet published, meeting and seminar hand-

outs, and downloadable programs, spreadsheets and workbooks.

The Committee on Online Services developed the new searchable database of links to other Web sites to provide users with an easier way to find links of actuarial interest. Rather than scrolling through a long list of links, Web

Annual Meeting

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cal advances were concerns for Lehmann. While he characterized mergers and acquisitions as not being "a big problem for actuaries in the past," he cautioned that they could have an impact on actuarial positions. He reasoned that the smaller number of insurance companies could eliminate or consolidate existing actuarial positions, thus lessening the number of actuarial jobs. Lehmann also warned that actuaries must be at the forefront of technological advances or face "the danger of irrelevance."

In concluding his speech, Lehmann proposed several initiatives for CAS to prepare for the new millennium. First, he suggested that CAS take a cue from its successful efforts to educate members about dynamic financial analysis and mobilize research and education efforts into nontraditional practice ar-

Site visitors now have the ability to search for sites by topic or keyword. Visitors can also complete a form to submit new links to the searchable database. The links database can be searched through the "Sites of Interest" section of the CAS Web Site. ■

eas. Second, he proposed making the CAS education program more like MBA programs with emphasis on team building, negotiation, and communication skills. Lehmann added that the CAS "must find a way to shorten our examination system, particularly in the basic education area to rely more on universities, without lowering our standards or giving up examination on key areas of actuarial practice." Third, Lehmann proposed developing additional strategic planning tools for actuaries that can be applied to the financial services industry.

"If we can do these things, I firmly believe the future will be bright indeed for casualty actuaries," said Lehmann. "It will expand our actuarial horizons and allow actuaries to move into roles of strategic planning and other leadership positions in the insurance and financial services businesses and it will make our profession more attractive to the best math and business students." ■

2000 Research Conference Set For Québec City

Université Laval will host the 35th Actuarial Research Conference, August 10-12, 2000, in Québec City, Québec, Canada. The conference traditionally has been the central meeting for North American academics and researchers interested in actuarial science. The theme of this year's conference is "Actuarial Research at the Threshold of the New Millennium."

The conference is co-sponsored by the CAS, Actuarial Education and Research Foundation, the Society of Actuaries, and the five other actuarial organizations in North America. June 15, 2000 is the deadline to register for \$140 Canadian. Paper titles and abstracts are due from authors by June 15, 2000. Each year the papers presented at the conference are published in the Actuarial Research Clearing House (ARCH). Additional information about the conference can be found at www.act.ulaval.ca/arc2000/home_en.htm. ■

FINANCIAL REPORT FISCAL YEAR ENDED 9/30/99

OPERATING RESULTS BY FUNCTION

FUNCTION	INCOME	EXPENSE	DIFFERENCE
Membership Services	\$1,148,017	\$1,349,928 (a)	(\$201,911)
Seminars	1,029,307	897,107	132,200
Meetings	581,529	543,300	38,229
Exams	2,615,075 (b)	2,433,229 (b)	181,846
Publications	42,762	25,844	16,918
TOTAL:	\$5,416,689	\$5,249,408	\$167,282

NOTES: (a) Includes loss of \$170,973 to adjust marketable securities to market value (SFAS 124).

(b) Includes \$1,475,850 of Volunteer Services for income and expense (SFAS 116).

BALANCE SHEET

ASSETS	09/30/98	09/30/99	DIFFERENCE
Checking Accounts	\$149,088	\$134,490	(\$14,598)
T-Bills/Notes	3,436,980	3,537,154	100,174
Accrued Interest	49,902	51,708	1,806
Prepaid Expenses	74,072	72,451	(1,621)
Prepaid Insurance	11,184	16,871	5,687
Accounts Receivable	39,461	11,255	(28,206)
Textbook Inventory	12,247	8,174	(4,073)
Computers, Furniture	313,752	386,873	73,121
Less: Accumulated Depreciation	(254,800)	(256,384)	(1,584)
TOTAL ASSETS	\$3,831,886	\$3,962,594	\$130,709

LIABILITIES	09/30/98	09/30/99	DIFFERENCE
Exam Fees Deferred	\$388,425	\$500,444	\$112,019
Annual Meeting Fees Deferred	42,246	29,355	(12,891)
Seminar Fees Deferred	61,440	27,441	(33,999)
Accounts Payable and Accrued Expenses	372,716	263,779	(108,937)
Deferred Rent	15,384	9,018	(6,366)
Unredeemed Vouchers	0	19,800	19,800
Accrued Pension	38,714	37,896	(818)
TOTAL LIABILITIES	\$918,925	\$887,735	(\$31,190)

MEMBERS' EQUITY

Unrestricted	09/30/98	09/30/99	DIFFERENCE
CAS Surplus	\$2,560,111	\$2,727,393	\$167,282
Michelbacher Fund	102,249	105,861	3,612
Dorweiler Fund	2,771	1,911	(860)
CAS Trust	19,765	36,616	16,851
Research Fund	166,207	133,207	(33,000)
ASTIN Fund	43,353	52,046	8,693
Subtotal Unrestricted	\$2,894,456	\$3,057,034	\$162,578

Temporarily Restricted

Scholarship Fund	\$6,895	\$6,738	(\$157)
Rodermund Fund	11,611	11,087	(524)
Subtotal Restricted	18,506	17,825	(681)
TOTAL EQUITY	\$2,912,962	\$3,074,859	161,898

C. Gary Dean, Vice President - Administration

This is to certify that the assets and accounts shown in the above financial statement have been audited and found to be correct.

CAS Audit Committee: Paul Braithwaite, Chairperson; Charles A. Bryan, Anthony J. Grippa, and Richard W. Lo

In My Opinion

From page 2

purpose other than supporting the community in every respect. This energy has no ego-based (political?) agenda. It also suggests that the “system,” as it is constructed, is operated by a fully enfranchised membership. This is the ultimate form of self-governance. All of this brings me to a matter that has

“Would a position statement help this process? I must say I would have to be convinced.”

received a bit of recent attention on these pages—the question of whether the nominees for various elected positions in the CAS should be required to produce “position statements” on various issues ahead of the election. We certainly may debate the value of position statements of some variety—and whether they may help improve the quality of the results of the election process and ultimately strengthen the CAS. At this juncture I would only like to offer as Exhibit A the accomplishments of the culture of volunteerism, only a tiny part of which is ratified by elections, over the past thirty-five years. The fact is that the vast majority of those who serve the CAS in various capacities do so as appointed volunteers. And out of those appointed volunteers, a few go on to greater appointed positions of service and are ultimately drafted for elected positions of service. In a sense this is as close to a “meritocracy” as one can get. Would a position statement help this process? I must say I would have to be convinced. The evidence of the U.S. election process—for paid positions—with all of its platforms and various other position statements does not augur well for this idea. In fact, the process of having position statements, in a sense, diminishes the idea of volunteerism for service to the community, by people

25 Years Ago in *The Actuarial Review*

(From M. Stanley Hughey’s “From the President” column:)

It is no longer news that our Society is growing rapidly—from 311 in 1955 to 408 in 1965 to over 600 currently, and to a probable 700 by November 1975. This growth is exciting to those of us working in the casualty actuarial field because it reflects a rapid growth in the kinds of problems we’re trying to deal with every day, and in the demand for our particular brand of expertise.

(After more than doubling from 1955 through 1975, our membership more than tripled over the next 20 years!)

(From a front page news story:)

The **Godbolds** [**Mary Jo and Nathan Terry**] are the first married couple to become members of the CAS in its history and their particular distinction is that they made it on the same day. They received enthusiastic applause from the membership....

(And they are still together and working together as actuaries!) ■

Today in *The Actuarial Review*: A Contest

How many married couples are there in the CAS today? 10? 20? More?

Enter our contest by identifying as many such couples as you can, and sending your list to the AR. With your list, send your guess of how many of these couples will be identified in total. We’ll compile your responses and provide a total count in the next issue.

The AR will award a handy CAS duffel bag to the member who identifies the most such couples. In the event of a tie, the winner will be the one who came closest in guessing the total number of such couples who were identified. If there is still a tie, then we will award the prize at random to one of the finalists. ■

who otherwise have full-time jobs, and who put in many hours of their personal time in service to the community. Would a person who can write a superior position statement make a better servant of the CAS? I am not sure. The track record of the group wisdom of the past thirty-five years or so has been virtually spotless from almost any point of perspective.

I would urge great caution and great deliberation in stepping out in the direction of politicizing the energy of the volunteers who serve the CAS. At a minimum, we need to be specifically aware of what a position statement can do to improve the process and what a position statement can do to harm the process—and then balance those interests. The mere idea that some people feel it somehow would be better if we had position statements is simply not enough. From what I have seen and heard thus far, it seems that the idea of “position statements” has all the characteristics of a solution looking for a

problem. Isn’t the question really “how can we get more information about the various candidates?” Doesn’t the fact that the candidates are persons who have demonstrated a long track record of substantial volunteer service say enough about them? The reality is that there is no assurance that position statements will provide any better information about the candidates than what they have already put forth as volunteers. That speaks volumes. And the Nominating Committee annually performs the service of selecting from among the numerous volunteers. Of course, if someone feels that a deserving person has been overlooked, it only takes a handful of members to advance additional nominees. It seems to me we have the best of all worlds. The burden clearly falls on the shoulders of those who would advocate the change—to show that having position statements would materially advance the quality of the process. At this point that looks like a stretch. ■

Whatever Is an Actuary?

By Matthew Rodermund

The following was first printed in 1982 for the newsletter of Medford Leas, a retirement community in New Jersey.

Two Medford Leas residents, Franklin Blair and **Matthew Rodermund**, are actuaries. The present tense is appropriate because, although retired, each remains a member of his professional society. It is those societies, not the nature of an individual's occupation, that bestows on him the designation of actuary. Admission to the professional societies requires passing a series of rigorous examinations.

But what in the world is an actuary? Before that question is answered, here are a few definitions, and characterizations, that have surfaced over a long period of years from outside the profession:

An actuary is a place where they bury dead actors.

An actuary is what you get when you cross a computer with a gypsy fortune teller.

A computer is an actuary with a heart.

An actuary is one whose main object is to justify by reason a course of action adopted in error.

And the classic definition: An actuary is a person who can pursue a straight line from an unwarranted assumption to a foregone conclusion.

Seriously, one of the most accepted definitions is that an actuary is one trained in evaluating the current financial implications of future contingent events.

But that definition is pretty fancy. Almost all actuaries are in insurance, so a simple definition is that an actuary is a mathematician dealing with probabilities in the insurance business.

A Fellow of the Society of Actuaries normally spends his career in life insurance. His principal functions are to calculate the probabilities of when people will die and, from those, to calculate rates and establish reserve funds to enable a company to pay the proceeds of life insurance policies and to

pay annuities and pensions. A life actuary also would calculate, for example, the funds to be held by a community like Medford Leas to meet its obligations to its residents. Such calculations would be based in part on the expected average mortality of the residents.

A Fellow of the Casualty Actuarial Society normally deals with insurance other than life, e.g., automobile, workers' compensation, fire, windstorm, ocean marine, bonding, aviation, and (perhaps the most important) liability—the responsibility to recompense for injuries or damages suffered by others than the insured because of the insured's negligence.

A casualty actuary's principal functions are similar to those of a life actuary, except that the casualty actuary calculates the probability of accidents or loss occurrences and their severities.

He also sets the rates that establish reserve funds to pay such losses. In addition, he estimates the probable cost of losses not yet reported but covered under policies long expired. An example would be a medical malpractice loss that develops many years after the original medical procedure.

The foregoing descriptions of actuarial functions, though over-simplified, should convey the general idea. However, they don't suggest the opportunities actuaries get, because of their overall knowledge of the business, to enter into general administration and executive positions, and into areas like investments, risk selection, and marketing. Almost all paths in the insurance world are open to actuaries.

Someone once said that an actuary is a guy who, if he enters a revolving door behind you, comes out ahead of you. It seldom happens.■

CAS and SOA Consider CD-ROM Study Note

The Casualty Actuarial Society and the Society of Actuaries are considering a CD-ROM-based interactive study note for inclusion in the *Syllabus* for Exam 3 and Exam 4, beginning with the Fall 2000 exams. It would allow candidates "hands-on" exploration of the models covered in Exams 3 and 4, both numerically and graphically. As currently conceived, it would require software to be loaded and run on a Pentium class computer with at least 24 MB of RAM and 100 MB of free disk space, running Windows 95, 98, or NT. A processor speed of 166 MHz is recommended.

The CAS and the SOA are seeking feedback from candidates who plan to take Exams 3 and 4 on the availability of a suitable computer on which to use this software. The two organizations would like to know the following:

- What type of computer (if any) do you own? Does it meet the requirements listed above?
- Are you a student or employed?
- If employed, what type of computer can you use at work onto which you could load the study note?
- If a student, what type of computer is available to you at the university onto which you could load the study note?
- In which country do you live?

Responses are requested by March 10, 2000. Please respond in the Students' Corner of the CAS Web Site (www.casact.org) under "CD-ROM Study Note Feedback." For those without access to the Web Site, please respond by fax [(703) 276-3108] or e-mail (tdowney@casact.org) with "CD-ROM Study Note" in the subject line.■

Learning Your ABCDs

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

A section of the material used in the Course on Professionalism Education (COPE) addresses the Actuarial Board for Counseling and Discipline (ABCD). To date, however, only one-half of the CAS membership has taken the COPE. Test your knowledge by taking the following "exam" related to the operation and structure of the ABCD.

1. The ABCD is part of which of the following organizations:
 - A. American Academy of Actuaries
 - B. Casualty Actuarial Society
 - C. Society of Actuaries
 - D. none of the above—It is an independent body
2. The ABCD has authority to handle matters related to practice in the United States by Canadian actuaries.
 - A. True
 - B. False
3. The ABCD has expelled casualty actuaries in the past.
 - A. True
 - B. False
4. Prior to the ABCD, an actuary who was a member of more than one professional organization could be investigated:
 - A. exclusively by the organization most related to the practice at question.
 - B. exclusively by the American Academy of Actuaries
 - C. by the Board of Actuarial Discipline
 - D. by multiple organizations

5. In order to uphold the reputation of the profession, all disciplinary recommendations are public; private reprimands are not an option.

- A. True
- B. False

6. ABCD Members are:

- A. elected
- B. appointed by the Board of the American Academy of Actuaries
- C. appointed by a committee of president/president elects of the participating organizations.
- D. appointed by the United States Congress

7. All requests for guidance from ABCD are brought before the full board to ensure consistency.

- A. True
- B. False

8. The address of the official Web Site of the ABCD is:

- A. www.abcdboard.org
- B. www.wecanhelp.org
- C. www.abcdefgh.org
- D. www.throwthemout.org

9. The ABCD only accepts complaints directly from which group?

- A. Credentialed actuaries
- B. Credentialed actuaries and actuarial students with at least three full exams.

C. Officers of the participating organizations

D. Anyone may file a complaint with the ABCD.

The answers are provided at the end of this article; grade yourself. If your score is:

8-9—You are exceptionally well informed and a credit to the CAS (and likely an ABCD member).

6-7—You are better informed about the ABCD than most of your peers.

< 6— You are a good candidate to visit the ABCD Web Site (remember www.abcdboard.org).

Answer Guide

1. D

2. A

3. B—The ABCD can not impose discipline, but only recommend it when appropriate.

4. D

5. B—A private reprimand option was added effective January 1, 1999 but is currently only an option for CAS members.

6. C

7. B

8. A—OK, this was a gimme.

9. D■

Hey Prize Competition Underway

Once again, the Faculty and Institute of Actuaries in the U.K. are sponsoring The Brian Hey Prize, a competition for papers on general insurance subjects. The competition is open to all. The subject of the 2000 Brian Hey prize is "Understanding the Insurance/Reinsurance Cycle."

The first prize is £1,000 and free entry to the 2000 GIRO conference. Papers must be written in English, less than 50 pages long, and submitted by July 1, 2000 to the following: Barbara Beebee, Institute of Actuaries, Staple Inn Hall, High Holborn, London WC1V 7QJ.

The prize will only be awarded if papers of sufficient merit are received to warrant giving a prize. The GIRO Committee will decide on any prize winner(s) and their decision is both arbitrary and final.

For more information, visit the organization's Web site at www.actuaries.org.uk.■

Accounting Standard Setters Propose Discounting Property Casualty Reserves

Unearned Premium Reserves and Deferred Acquisition Assets Also Affected

by **Ralph S. Blanchard**, Chairperson CAS Task Force on Fair Value Liabilities

In December 1999, both the Financial Accounting Standards Board (or FASB, the principal setter of accounting standards in the United States) and the International Accounting Standards Committee (or IASC, an international organization attempting to develop greater uniformity to accounting rules across the world) issued exposure drafts proposing "fair value" accounting for insurance liabilities. What is "fair value" accounting? It is market value accounting, except for situations when established markets don't exist. In those cases, the "fair value" is what the market price would be if a fair and efficient market existed. And it is gen-

erally understood that the market price will reflect the time value of money, i.e., be a discounted value. Therefore the proposal to have fair value accounting for insurance liabilities implies discounted values for insurance liabilities.

What insurance liabilities? Per the FASB, all those that are eventually settled via cash transactions. This would include loss (and loss expense) reserves, unearned premiums, contingent commissions, etc. As to deferred acquisition costs, the FASB does not see prepaid acquisition costs as a recognizable asset under fair value accounting, hence these assets would disappear under the proposals. Any ben-

efit from prepaying expenses would instead be reflected by a reduced "fair value" of the obligations included in the unearned premium reserve.

What does this mean to actuaries? When is this going to happen? Currently, both the FASB and IASC initiatives are in a preliminary stage. The FASB proposal is included in what is called a "Preliminary Views" document (which can be downloaded free from their Web site at www.rutgers.edu/Accounting/raw/fash.) outlining their preliminary views on how fair value accounting of financial instruments might work. (They include insurance liabilities in their defi-

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1999 Reserves Call Papers Reviewed

by **David A. Foley**

At the Casualty Loss Reserve Seminar on September 13-14, 1999 in Scottsdale, Arizona, six sessions were devoted to the 1999 Call for Papers sponsored by the Committee on Reserves. The topic of this year's call was "Evaluation of Non-Loss Reserves." The thirteen papers submitted in response to the call explored such issues as unallocated loss adjustment expenses, uncollectible reinsurance, declaratory judgements, and unearned premium reserves for long duration contracts. A \$1,000 prize for the best paper was awarded to **Thomas Struppeck** for his paper, "Premium Earning Patterns for Multi-Year Large Deductible Accounts."

On Monday morning, **Victoria Lusk** kicked off the Call Paper Program with her paper "Unearned Premium for Long Term Policies." Victoria's presentation focused on the treatment of aggregation across policy years, discount date, and risk margin in the statutory rule for unearned pre-

mium reserves for long-term policies. **Roger Hayne** then discussed "Unearned Premium Reserves for Long Term Contracts," which explored the impact on earned premiums as a result of the new statutory requirements for unearned premium reserves.

In the second session, **Grover Edie** presented his paper "Evaluating the Unearned Premium Reserve for Automobile Extended Service Contracts." Grover explored the importance of data segmentation in discussing a methodology of estimating the adequacy of the unearned premium for extended service contracts for automobiles. Joseph Change then presented an approach to calculate the unearned premium reserves for an automobile extended warranty insurance program, test the adequacy of the calculated reserves, and determine the allowable deferred policy acquisition expenses as described in his paper "Automobile Warranty Unearned Premiums and Deferred Policy Acquisition Costs."

On the last session on Monday, **Bruce Ollodart**, author of "Reserves for Uncollectible Reinsurance," discussed a variety of issues pertaining to uncollectible reinsurance such as a methodology to estimate the uncollectible reserve, data sources, legal concepts, and financial reporting issues. **Lee Steeneck** discussed issues regarding the recognition and measurement of declaratory judgment action (DJA) expenses. His paper, "Declaratory Judgment Reserving," includes a case study application of the DJA expense reserving using a simplified report year count and amount methodology. In a concurrent session, **Robert Walling** presented his paper "A Dynamic Approach to Modeling Free Tail Coverage." This paper presents two completely different methodologies to estimate the free tail coverage unearned premium reserves. One approach starts with an existing deterministic model and the second approach uses stochastic simulation.

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On Tuesday, prize-winning author Thomas Struppeck presented his paper, "Premium Earning Patterns for Multi-Year Large Deductible Accounts." As an example, Tom used a catastrophe cover with a multiple trigger to illustrate some unusual earning patterns that can occur when the pure premium portion of the unearned premium reserve is exactly adequate to cover the remaining risk of the policy.

In the next session on "Reserving for Loss Sensitive Premium Items," **Brian Brown** examined the importance of using probability distributions to reflect the range of potential outcomes when estimating the accrual for loss sensitive premium items. He illustrated how the use of expected outcomes could result in a biased estimate. **Annette Goodreau** discussed the advantages of calculating the retrospective premium reserve on an account basis versus a bulk basis. Her paper "Accrued Retrospectively Rated Premiums by Individual Accounts" describes a method to calculate this reserve by individual policyholder.

In the final session, **Joanne Spalla** presented her paper "Using Claim Department Work Measurement Systems to Determine Claim Adjuster Expense Reserves." Joanne shared with the audience the process and tools used at her company to capture the type of data necessary to use a "transaction-based" method for calculating the ULAE reserve. **Craig Allen** presented the paper he wrote with **Donald Mango**, "Two Alternative Approaches to Unallocated Loss Adjustment Expense Reserving." In their paper, Craig and Donald discuss the possible shortcomings of the paid-to-paid and Johnson methods and propose two alternative methods to overcome these potential shortcomings in estimating the ULAE reserves.

Readers interested in learning more about these papers are directed to the fall edition of the *CAS Forum*, which was distributed in September 1999. The papers are also available on the CAS Web Site. ■

Brainstorms

Surplus Allocation Redux

by Stephen W. Philbrick

Allocation of surplus, and its close cousin, risk load, are concepts that fascinate me. I've written several columns in the past, dealing with this subject. While it sounds like an esoteric subject, insurance as a product cannot be written without making some assumption.

Even those who argue for the indivisibility of surplus have to make an implicit assumption. Allocation of surplus is not a compartmentalization of surplus. It is not an end product—it is an intermediate calculation. For those who accept that actuarial pricing of risks includes determining an adequate return, allocated surplus is the "what" in the question, "Adequate return on what?"

I'm probably a bit ahead of myself. Some still argue that returns should be calculated on premium, not on surplus. The recently published monograph, *Actuarial Considerations Regarding Risk and Return In Property-Casualty Insurance Pricing* (www.casact.org/pubs/vfac/toc.htm) has its genesis in a debate over this distinction. This book has many fine articles on a variety of subjects, including this debate. I found myself in broad agreement with the proponents

for both sides, however. I haven't yet determined whether my reading comprehension is deficient, or the authors were not really in dispute.

A number of the articles touched on the need to determine allocated surplus, as a start to determining the required return on a policy or block of policies. **Frank Pierson's** article, "Rate of Return," was particularly intriguing, both in terms of his argument that an insurance policy can be viewed as a "reserve" investment, as well as his exposition of an allocation algorithm.

Russ Bingham provided a useful service by showing the equivalence between two important cash-flow modeling approaches. What I would like to see is the extension of this concept to allocation techniques. **Todd Bault** started this process, with a discussion in the 1995 *Proceedings* (www.casact.org/pubs/proceed/proceed95/95078.pdf) attempting to show comparisons among competing risk load formulas.

Has the problem been solved? Are the apparently different approaches in the literature ultimately identical if we carefully identify assumptions and notation?

Dan Gogol wrote a paper in the 1996 *Proceedings* (www.casact.org/pubs/proceed/proceed96/96041.pdf) with a strong claim:

It will be shown below, by Theorem 1, that in a certain sense the above covariance of a category with surplus is proportional to the category's effect on surplus variability. It is shown by Theorem 2 that if surplus is allocated to each category of underwriting according to the above formula, and the appropriate risk-based loss discounting rate is used, the following is true. Each category will improve the risk-return relation of the insurer if, and only if, its rate of return on allocated surplus is greater than the rate of return on the total amount of surplus allocated to underwriting.

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Two Fuses

by John P. Robertson

You have two fuses, each 12" long. Each fuse burns in exactly one hour, but does not necessarily burn at a uniform rate. Also, the two fuses do not necessarily burn at the same rate over corresponding segments. But a given segment on a given fuse burns in the same amount of time in either direction. How do you use these two fuses to time 15 minutes? Extra credit—how do you time 15 minutes using only one fuse?

Springs and Strings

The last puzzlement involved a weight suspended from a combination of springs and strings. The problem was to determine the final position of

the weight after one of the strings was cut. **Philip Heckman** observes that, surprisingly, the final position of the weight is higher than the original position. In the initial position, the full weight is applied to each of the springs. After the string between the springs is cut, each spring supports only half the weight. Thus, each spring contracts to 5" length, and the weight winds up 26" from the ceiling.

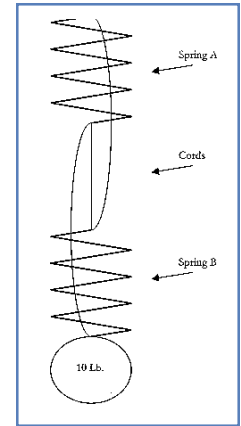
Various solvers pointed out that the puzzle ignored the weight of the strings, the fact that under zero weight real springs would not contract to length zero, and some other items.

As presented in the puzzlement, the initial configuration seems to have

only one equilibrium position. The position after the string is cut is not an equilibrium position for the initial

position because now the distance between the springs is 16", while the string that was cut is only 10" long. I wonder whether there are any configurations that do have two, or more, equilibrium positions?

Solutions were also sent in by **Chris Cooksey, Walter Fransen, and David Skurnick.**■



Fair Value Liabilities

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inition of "financial instrument".) They are looking for comments by May 31, 2000, to help shape the future direction of the project. While the entire project currently includes many other liabilities (and assets) besides those of insurance, it is possible that insurance would eventually be broken off from the main project and handled separately. This is a mid- to long-term project, with no definite timetable as of yet.

The IASC project, meanwhile, is on a parallel track. They have published an "Issues Paper" dealing exclusively with insurance, including the proposal that insurance liabilities be reported at fair value, with a comment deadline also of May 31, 2000. (This document

can be ordered from their Web site at www.iasc.org.uk, for \$51.)

A few caveats. These proposals affect GAAP accounting, the kind used in annual shareholder reports and prospectuses, not the kind used for tax or statutory accounting. The international accounting standards would also have to be adopted eventually by the local country accounting authorities. In the U.S., that would be the Securities and Exchange Commission, which delegates most of this task to FASB.

What is the CAS doing about this? A task force has been set up to study the issue and **Steve Lowe** has been appointed as the CAS representative to the International Actuarial Associations' IASC committee. The CAS Task Force on Fair Value Liabilities is charged with issuing a white paper on the issue, and providing input to Steve Lowe in his work. Parts of the white paper are also expected to be used in official American Academy of Actuaries responses to the FASB and IASC documents. (For more information, see the CAS Web Site at www.casact.org/research/tffv1/index.htm. Comments are welcome, and can be sent to those involved with the project.)■

Brainstorms

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This isn't just an arbitrary approach. It appears to be an optimal algorithm, backed up by Theorems. Despite this ambitious claim, I haven't seen it either challenged or affirmed. The *Actuarial Considerations* monograph doesn't even mention his article, but it turns out that this is because the papers in that monograph were largely written prior to the publication of Gogol's paper, so the authors did not have a chance to weigh in on the subject.

I have written before about my fascination with an algorithm called the Shapley value. This algorithm can also be used to allocate surplus to line, and its developers make equally strong claims. I haven't yet determined whether the two approaches are identical, or talking about different problems.

I hope other actuaries interested in this issue will read some of the recent papers on the subject, and help me determine whether we have solved this important problem, or whether more research is still needed.■

In Memoriam

Edward Faust

(FCAS 1960)

December 6, 1996