



# The Actuary

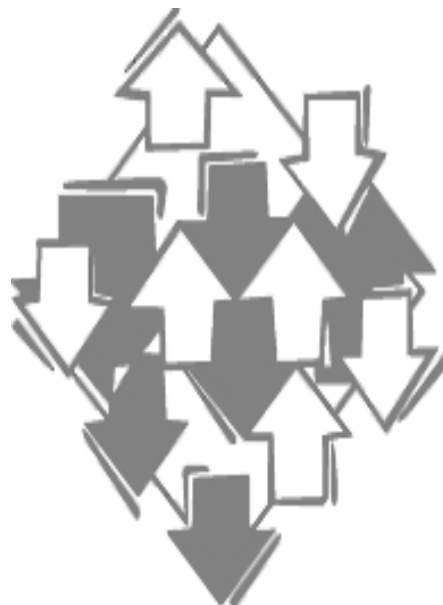
## What's the impact?

### The upsides, downsides to individual Social Security accounts

**P**rivatization as an element of the U.S. Social Security system is still being debated. To contribute to the discussion, the Society of Actuaries cosponsored a symposium on privatization's potential impact, featuring U.S. and international experts on social security and pensions. In the public debate, the concept of privatization has a number of different connotations, including use of individual accounts, investing funds in equities, or both. This symposium's primary focus was on the use of individual accounts.

The symposium, "Impact of Social Security Privatization on Retirement Income," was held May 13 at the University of Michigan. The SOA joined in this effort with the Mathematics Department and the Business School of University of Michigan, the Michigan Retirement Research Center, and the American Academy of Actuaries. (The retirement research center is one of two such centers with major funding from the Social Security Administration.)

The public debate around privatization is clouded by comparisons based on inconsistent actuarial assumptions and misunderstandings of how current and different systems work. The symposium's goals were to elicit a high-level, interdisciplinary discussion of the issues, to contribute to the debate, and to help actuaries participate in the debate on an ongoing basis.



The discussion relies on many actuarial concepts, and small changes in assumptions can alter perspectives on both the problems and the options. This article focuses on areas of the discussion that can help actuaries participate in the debate.

Four main topics were addressed:

- Overview of Social Security reform
- Pros and cons of privatization
- Impact of privatization
- Practical issues of privatization

#### Overview of reform proposals

An overview was presented by three speakers:

- Eugene Steuerle, senior fellow, The Urban Institute, discussing the broad Social Security debate

- Stephen Goss, deputy chief actuary, U.S. Social Security Administration, outlining recent proposals by U.S. President Clinton and by Reps. Bill Archer (R-Texas) and E. Clay Shaw (R-Fla.)
- Ron Gebhardtshauer, senior fellow, pensions, American Academy of Actuaries, focusing on proposals by the 1994-1996 Social Security Advisory Council, the Cato Institute, Sens. Daniel Patrick Moynihan (D-N.Y.) and Bob Kerrey (D-Neb.), and the National Commission on Retirement Policy. Steuerle began by noting that in this century, more and more U.S. budget

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# The Actuary

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## EDITORIAL

# The SOA, the profession and cash balance plans

by Anna M. Rappaport

**T**he press has been giving a great deal of attention to the rise of cash balance pension plans in American business. I see these plans as good for the public overall and important in the U.S. pension system's future. The profession and the SOA have vital roles to play as these plans grow in usage and the business environment continues to evolve.

Actuaries outside the pension practice area may wonder what cash balance plans are all about. Essentially, they contain elements of both defined benefit and defined contribution (DC) plans. From the participant's view, these plans include an account which is like a DC plan but with the method of setting investment return specified in the plan document.

Cash balance plans are a response to trends. American business has been undergoing a major transformation. This transformation is wonderful, say some. U.S. business is leading the world, the stock market is soaring, corporate profits are high, unemployment is low, and people have better jobs. New pension plans emphasize portability and good value regardless of how often people switch jobs. But others say it's terrible. Traditional jobs, especially for middle managers, have been restructured or eliminated; individuals who haven't kept up their skills are unemployed or under-employed; and expectations of "cradle-to-grave" employment haven't worked out. And to top it off, pension plans don't work the way they used to.

For many U.S. companies, labor cost reductions have been vital to competing in the changing business environment. Since cash balance plans are part of this transformation, their

adoption is often seen as a way to save money. This is false reasoning. Cash balance plans do not save money. Reducing benefit levels saves money.

What are the responsibilities of the SOA and the profession in effectively dealing with the business world's transition and the increased use of cash balance plans?

#### The profession's role

Change is never easy, and it may be especially hard in this instance because actuaries play two conflicting roles in dealing with cash balance or any type of pension plan. The valuation actuary must certify the adequacy of reserves and, under ERISA, act in the interest of plan participants. But as an advisor to plan sponsors, actuaries must help the sponsor decide if these plans fit the organization's needs and sort out the surrounding issues.

Both roles are difficult because the issues involved are complex and because most changes produce winners and losers. Different plans allocate dollars in very different ways. I see the role of the actuary as making sure that all the facts and issues are on the table. The issues should be described from the perspective of various stakeholders. Then, the plan sponsor can do a good job of evaluating alternatives, and, eventually, do a good job of communicating about the selected alternatives to employees. As a consultant, the actuary should assist the plan sponsor in linking business goals to various alternatives. It is not the job of the actuary to make value judgments about which plan is better.

Companies are not required to sponsor pension plans. They will do so only if it is good for business. The actuary should assist in making that

work. The actuary has no direct role with regard to participant communication. However, an actuary should provide complete information to the plan sponsor, which should support the plan sponsors in developing their communication programs.

Much of the press coverage on cash balance plans has been negative, and members of the profession have been criticized directly. News coverage has focused on what some see as a lack of honest and thorough communication to employees about the differences between cash balance plans and traditional plans. I strongly support giving employees honest and complete information. I also support researching employee groups to understand what information is likely to be effective. Information overkill just makes the topic incomprehensible for employees.

#### **The SOA's role**

The Society of Actuaries has concentrated heavily on education, research, and service to its members concerning the transition in American business and

the growing use of cash balance plans. Recent meetings have offered many sessions on these topics. *The Actuary* has published numerous articles, even devoting a majority of some issues to business changes affecting pensions and life and health insurance. Also, in 1998, the SOA cosponsored a symposium, "Strategies for a Changing Workforce," with the International Foundation of Employee Benefit Plans and the American Compensation Association.

The SOA has prepared two research studies on cash balance plans, one of which is discussed in this issue (see story, page 11). The other study, "Actuarial Aspects of Cash Balance Plans," includes a survey of cash balance plan provisions and discusses the associated actuarial issues. It will be released during 1999.

The SOA also has focused on events of the post-retirement period and the increased use of lump sums. A major SOA research project, "Retirement Needs Framework," seeks to advance

our thinking about these events, getting data and modeling them.

These and efforts by other actuarial organizations are helping actuaries deal with questions surrounding cash balance plans and the turbulent business world. Our clients and employers need us, and the public needs us more than ever.

*With this issue, we welcome Anna M. Rappaport to The Actuary's editorial board. Rappaport was the 1998-99 president of the Society of Actuaries. In addition to long, devoted service on SOA committees and task forces, Rappaport, a principal and consulting pension actuary for William M. Mercer, has been a catalyst for major SOA projects such as the 1998 Retirement Needs Framework Conference and the current Retirement 2000 project. She has written frequently for The Actuary on pension-related topics. Contact her by e-mail at [anna.rappaport@us.wmmercer.com](mailto:anna.rappaport@us.wmmercer.com).*

## RETIREMENT CORNER

What's going on at the SOA in the retirement needs practice area? Here are highlights of some current activities.

#### **Asset valuation methods**

A summary of survey results on asset valuation methods in use and how various plan circumstances and features may influence the method selected is now available from the SOA Books Department (phone: 847/706-3526; fax: 847/706-3599; e-mail: [bhaynes@soa.org](mailto:bhaynes@soa.org)). As a follow-up to this report, a call for papers is being issued on classification and effectiveness of asset valuation methods for uninsured pension plans. These efforts are intended to fill

gaps in the literature in order to reflect the significant changes in pension plans, investments, returns, and markets that have occurred since the 1970s.

#### **Retirement 2000**

Mark your calendars for the Retirement 2000 conference in Washington, D.C., Feb. 23-24, 2000. Featured will be presentations and discussions on roughly 20 papers discussing retirement issues and public policy implications. The presentations will be grouped in the following topics: Getting Dollars Saved, Once the Dollars Are Saved, The Border Period and the Retirement Decision, and The Payout Phase.

#### **Ongoing Research**

**Mortality:** Later this year, the SOA expects to circulate an exposure draft of the RP2000 Mortality study. The study, based on about 11 million life-years of uninsured pension plan experience, not only will provide graduated mortality tables but also discuss differences by industry, collar type, and annuity size.

#### **Actuarial Aspects of Cash Balance Plans**

This project spotlights new trends in the design of cash balance plans and the actuarial issues they raise. Results are expected this winter.

**Upcoming publication:** Papers from the Retirement Needs Framework project will be available in a monograph later this year. This project focused on the oft-ignored post-retirement period. Topics covered include modeling of changing financial needs, investment choices, effects of declining health, death of a spouse, payout options, and retirement age.

**Information on initiatives in the SOA's retirement practice area is available from the SOA office.**

**Contact Cathy Cimo (phone: 847/706-3587) or Judy Anderson (phone: 847/706-3590; fax: 876/706-3599; e-mail: [ccimo@soa.org](mailto:ccimo@soa.org) and [janderson@soa.org](mailto:janderson@soa.org)).**

## What's the impact? (continued from page 1)

allocation decisions are preordained by the actions of past voters and legislators, citing a decrease in the entitlement budget's discretionary portion from two-thirds in 1962 to one-third in 1996. As "ownership" becomes more removed from the current public, the younger generations become increasingly skeptical of entitlement programs such as Social Security.

Turning to old age programs, Steuerle cited four primary factors affecting their growth:

1. Continuous real growth in annual pension benefits for each cohort of retirees (because the pension benefits replace the same percentage of preretirement income over time)
2. Longer retirement span (due to early retirement and longer life-span)
3. Increasing aged dependency ratio

(the ratio of elderly to working-age people)

4. Open-ended subsidies for healthcare benefits

Steuerle's perspective is that the solution to Social Security's funding problems hinges on budgeting future resources to meet all future needs, not just pension needs. One of the major controversies in the debate is whether privatization creates growth in the economy and improved rates of return. Steuerle argued that it does not.

Goss, in his presentation, explained that recent proposals, starting with those of the 1994-96 Advisory Council on Social Security, have tended toward more advance funding and investment in higher yielding, but riskier, private securities, especially stocks. More recently, proposals have suggested meeting a portion of advance funding's

transition cost by using General Fund transfers, facilitated by the expected federal government budget surplus. Goss provided detailed actuarial estimates on several of the proposals.

Gebhardtshauer began his presentation by noting that all social security reform proposals must cut benefits or increase income through higher taxes or investment returns. Options for decreasing benefits include raising the retirement age, reducing cost of living adjustments, reducing the benefit accrual rate, subjecting retirement income to means testing, and increasing the number of years during which a worker must contribute to receive full benefits. Increasing tax options include raising the tax rate, raising the taxable wage base, taxing social security benefits, and expanding the coverage of social security to state and local

## Paygo vs. individual accounts: two views

**A** good overview of the pros and cons of individual accounts and the paygo system was offered by two speakers at the symposium, "Impact of Social Security Privatization on Retirement Income."

Advocating privatization was Peter Ferrara, general counsel and chief economist of Americans for Tax Reform and senior fellow at the Cato Institute. Speaking for paygo was Robert L. Brown, professor of actuarial science and director of the Institute of Insurance and Pension Research at the University of Waterloo.

### For private accounts and investment

Ferrara argued that a revolution in opinion and policy regarding social security is sweeping the world. Eight Latin American countries have adopted reforms letting workers choose

personal investment and insurance accounts as an alternative to traditional, government-run social security systems. Similar reforms have been adopted by five European and Eastern European countries, and even Communist China is implementing personal accounts rather than a traditional system.

Ferrara noted several reasons behind this shift. First is the financial crisis faced by traditional social security systems worldwide, which, he said, was inevitable in a mature paygo system. But a far bigger reason is that private investments through personal accounts will earn far higher returns and benefits than a mature paygo system. Such investments help produce new income and wealth, which finances a return on investment that averages the full, real, before-tax return to capital. Even if tax

revenues grew over time with growth in real wages and the number of workers, a mature paygo system, which is a tax and redistribution scheme, would never pay a return even remotely approaching the pre-tax, real rate of return to capital earned through private accounts.

He also argued that national economic growth would increase because of the savings and investment through personal accounts. Ferrara quoted Harvard Professor Martin Feldstein, president of the National Bureau of Economic Research, as estimating the present value of the net economic benefits from such reform to be between \$10 and \$20 trillion. Such expected benefits have led the World Bank to promote the shift to personal accounts around the world, Ferrara said.

government workers. Options for increasing investment returns include investing social security assets in the private sector and introducing private accounts.

#### **Privatization's pros, cons**

A spirited debate spotlighted two very different views of the effects of privatized defined-contribution (DC) accounts on the Social Security system. One view was presented by a luminary from Americans for Tax Reform and the Cato Institute, the other by a professor of actuarial science. (See sidebar, "Paygo vs. individual accounts: two views," page 4.)

#### **Impact of privatization**

Three presenters discussed the impact of various reform proposals from different perspectives.

- Sylvester J. Schieber, vice president, Watson Wyatt, and a member of the Social Security Advisory Board, discussed the risks involved in different approaches. (He also compared the

current social insurance programs in various countries and various reform proposals for the U.S. Social Security system along two dimensions — paygo vs. full funding and DB vs. DC. (See story, page 8.)

- Anna Rappaport, principal, William M. Mercer, considered the potential impact on women.
- Chris Bone, chief actuary, Actuarial Sciences Associates, Inc., summarized the potential impact on private pension plans.

Schieber identified the obvious Social Security reform risks to participants as being forced either to receive lower benefits than promised or contribute more dollars than anticipated. Major risks to the U.S. Social Security system include financial market risk, risks associated with changing the system's redistributive nature, and the risk of possible reductions in disability benefits. Some of the major risks in the current system, he observed, are those

associated with undiversified investments. Schieber noted the reasons for funding any retirement plan, including Social Security, as lower contribution costs over time, enhancing the ability of workers to meet consumption needs after retirement, and the importance of increasing national savings. He summarized reasons for moving to a DC approach as allowing a more dynamic adjustment of the system, the perception by workers that benefits are more secure, allowing more flexibility in raising contribution rates, and the possibility that it may be the only road to reform.

Schieber's conclusions were: there is tremendous risk in the current system, the current risks to retirement income security are not randomly distributed, using budget surplus will not eliminate current benefit risks, and diversification and plan design can reduce many of the risks.

*(continued on page 6)*

Social equity would be enhanced as well, he argued, as poor and moderate-income workers are able to participate in private markets for the first time, producing better benefits for them. This is far preferable to reforms that would cut benefits or increase taxes, Ferrara stated.

#### **Applauding the paygo system**

Brown, in his presentation, focused on establishing criteria that would ultimately provide "security for social security."

Brown began by comparing privatization with the advantages of a paygo defined benefit system, citing paygo advantages such as universality, vesting, and portability; indexing of benefit amounts; and low administrative costs.

Brown summarized research showing that prefunded systems have natural cost advantages over paygo financing under some economic assumptions but not others. He cited a study by the Canadian Institute of

Actuaries on the financing of Canadian social security systems. Using 1960s assumptions about demographic and economic events (including a 2% real rate of return on assets and a 2% real wage increase), the study found a significant advantage to the paygo method — finding that paygo would be less expensive than prefunding by 5.5% of payroll. However, based on 1990s assumptions (including a 4% rate of return on assets and only a 1% increase in real wages), paygo has a cost disadvantage of more than 7% of payroll. Brown questioned whether changes should be based primarily on different views of the future economy, particularly views that expect high rates of return and relatively low wage growth. Brown stressed the importance of using consistent assumptions when comparing systems, saying the recent U.S. debate has seen advocates of private accounts assuming higher rates of return on investments than used by

the government, placing the individual account concept in an apparently favorable light.

The historical effects of prefunding do not necessarily support a conclusion that prefunding social security benefits will increase gross national savings, Brown argued. He cited one study that found a decrease in the Chilean gross national savings rate from 21% when the Chilean system was adopted to under 19% in 1991. Another study found higher gross Chilean savings but attributed the result to factors other than prefunding of social security.

Finally, Brown questioned whether the additional funds generated by greater savings would lead to higher productivity or would instead be used in less-than-optimally productive pursuits.

**Peter Ferrara and Rob Brown can be reached by e-mail at, respectively, [kmeerstein@atr-dc.org](mailto:kmeerstein@atr-dc.org) and [rlbrown@pythagoras.math.uwaterloo.ca](mailto:rlbrown@pythagoras.math.uwaterloo.ca).**

## What's the impact? (continued from page 5)

Rappaport pointed out that currently 60% of Social Security beneficiaries are women, and also that life patterns other than "life-long wage earner" exist today. Thus, those analyzing the impact of reform proposals must consider the impact on women and use statuses beyond low-, medium- and high-wage earners.

Rappaport highlighted the diversity of life patterns, including part-time work, caregiving, and moving in and out of full-time work. Among the general trends she identified are:

more elderly, with many females living alone; increased life expectancies; and increasing health care costs. She identified Social Security's successes

as contributing to a major decrease in poverty — noting that 40% of elderly receive more than 80% of their income from Social Security — and providing a decent retirement income. Failures include potential future financial problems, concerns about equity, some continued poverty, and a lack of confidence in Social Security on the part of the general public.

She also highlighted the discrepancy in widow's benefits resulting from the distribution of income between husband and wife, regardless of total income level. If the wife earns half of the income, the widow's benefit is significantly less than if the husband earns all the income. For example, the widow's benefit to a family retiring at age 65, earning \$34,200 in 1998, and in which the husband dies immediately after retiring is about \$1,075 per month for the single-earning family and \$675 per month for a family where

earnings were split 50/50. She summarized concerns regarding women and Social Security as a decline in economic status during widowhood and decreased benefits after divorce. The challenges in reform are to use limited resources effectively, to define retirement and set retirement ages, to better define "family" and design family benefits effectively, and to meet post-retirement needs, especially for widows and divorced persons.

Rappaport said Social Security policy as it relates to women should incorporate consideration of the importance of a strong private pension system, diverse family needs, and long-term care. Rappaport emphasized that pensions should not be used to fix labor force problems, and that public education is essential, especially on retirement implications of decisions about pension assets, savings, and investments.

In closing, Rappaport identified the following concerns about individual accounts in Social Security reform:

- Individual accounts could increase the number of women in poverty or near poverty, especially those with lower pay, relatively short periods in the workforce, and/or conservative investment strategies.
- Social Security could become less of a safety net if death or disability benefits are inadequate or if participants who make poor investment choices aren't protected.
- High administrative costs present risk to lower-income beneficiaries.
- Women's situations, particularly in widowhood and divorce, are getting inadequate attention in the reform debate.

Bone explored the effects of some possible changes on pension plans and sponsors:

- Investing assets in private (domestic) equities
  - Privatization through IRA-like accounts
  - Increasing the retirement age
  - Reducing the cost of living adjustment
  - Increasing the FICA tax rates
  - Increasing the FICA tax wage base
- Bone noted that Social Security works in partnership with private plans, and changes in Social Security could have a major impact on private plans and their operation. Any IRA-like private accounts might have an adverse effect on 401(k) plans, reduce private savings, and create major challenges for DC plans. Effects on private employers' plans could impact both the design and administration of plans.

Bone concluded by highlighting the potential new retirement savings environment, including:

- A heterogeneous retirement savings system in which disparities may widen because of differences in the nature of work and the capacity to save
- Increased anxiety over retirement, resulting in the positive result of greater interest in retirement programs from employees, plan sponsors, and Congress

### Practical issues

The last segment of the symposium focused on issues surrounding the management and administration of individual accounts. The speakers were:

- Andrew B. Abel, professor, The Wharton School, University of Pennsylvania, and member, Technical Advisory Panel to the Social Security Advisory Board
- Gail Kellogg, partner (retired), Hewitt Associates
- Dallas Salisbury, president and CEO, Employee Benefit Research Institute



The discussion touched on a wide range of issues and topics related to administration of individual accounts.

Investments in equities have a higher expected return but are much riskier than fixed-income securities. The risk premium accounts for both bad and good times in the future, and when a bad period comes, it can have a major impact on near-term retirees.

With investment markets fluctuating, failure to invest contributions promptly can be a major problem.

Participant satisfaction is closely linked to plan administration. Participants expect timely and perfect administration. The standard for DC plans today is often daily valuation and instant transaction processing.

The administrative process has numerous elements, including setting up records, receiving contributions, answering questions, permitting changes in investment elections, balancing accounts to the penny, and more. Much of the process is commonly automated today, with call centers for inquiries that can't be handled solely on an automated basis.

It is unclear whether individual accounts for everyone can be administered at reasonable cost, particularly with the large number of small businesses and self-employed individuals lacking automated payrolls. Also, nearly 20% of workers covered by Social Security have annual earnings of less than \$5,000; since most proposals call for a 2% contribution, these workers would contribute \$100 or less annually, while administrative costs per account could be as high as \$50.

Processing errors are much easier to correct in a traditional system than in a DC system, where they may lead to lost investment earnings and where liability issues are involved. A big question is who would pay for such losses.

Administrative costs are important in returns, particularly for small accounts.

Some of the data put together on administrative costs appears to be overly optimistic. The discussion focused on data published by the Cato Institute for administrative costs. These were much lower than cost estimates published by State Street Bank, Boston, and presented at a Cato conference.

In response to questions, it was indicated that Hewitt has one person in DC administration for every 2,000-3,000 participants. This is in contrast to one in 250,000 assumed in some of the cost estimates for the cost of managing individual Social Security accounts, figures used by some advocates of private accounts. It was noted that while large private plans offer a high level of service, they can do this because of their automated payrolls and submission of data. One of the biggest administrative headaches for a Social Security individual account plan would be dealing with great volumes of contributions from small businesses lacking automated payrolls.

Dallas Salisbury reported on research with small businesses, EBRI work on administrative costs, and a survey that asked small businesses about individual account proposals for Social Security.

Fifty-nine percent of the small businesses surveyed said they would oppose any individual account system if they had to participate in administering the accounts.

The Social Security debate will continue to be a matter of vital importance to Americans. Major changes in the system can influence economic growth, securities, markets, employer retirement programs, and the well-being of a growing segment of our

population. The public debate on individual accounts is often based on poorly informed discussion. Even if these accounts were viewed as theoretically desirable in the U.S. Social Security system, the practical issues surrounding administration are a substantial barrier and would require significant planning and time before implementation.

Actuaries can be major contributors to the debate. Some areas where actuarial participation is particularly needed is in consistency and careful selection of assumptions. This is especially so when outside studies show much better results than official projections. Results may be projected under differing economic scenarios, treatment of risks, and understanding of how different options produce very different results for various segments of the population. **This story was compiled from reports of several individuals involved in the symposium: Christopher M. Bone, chief actuary, Actuarial Sciences Associates; Warren R. Luckner, director of academic initiatives, Society of Actuaries; Anna Rappaport, principal, William M. Mercer; and Michael M.C. Sze, the symposium's chief organizer, Sze Associates, Willowdale, Ontario.**

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# Reform proposals

## A framework for viewing Social Security proposals

by *Sylvester J. Schieber*

The U.S. Social Security debate in Washington has often deteriorated into shorthand code words that provide little information about the policy alternatives under consideration. One such code word is “crisis,” and whether or not Social Security’s financing situation is one. Another is “radical,” implying that those who would have us seriously consider alternative structures to the current one are revolutionary. Yet another is “privatization.” Use of such terms does little to inform the public about the issues.

Part of the Social Security debate now underway is about funding. The system currently runs largely on a pay-as-you-go (paygo) basis. The trust fund, with \$800 billion in assets, may seem gargantuan, but the balance represents only about 20 months of benefit payments. Allowing for a safety cushion to get the system through economic downturns, Social Security is largely funded on a paygo basis. This dimension of the debate is not about having a fully funded system versus one run strictly on a paygo basis. Instead, proposals take a variety of positions along a spectrum from paygo to fully funded financing.

The debate also looks to the structure of the system and the process whereby workers earn and ultimately are paid their benefits. The question here is to what extent Social Security benefits should continue to be provided through the current defined-benefit structure versus one that has some defined-contribution element. Once again, the debate is not about absolutes but rather an almost infinite set of possible combinations, ranging from a system that is fully defined benefit to one that is fully defined

contribution.

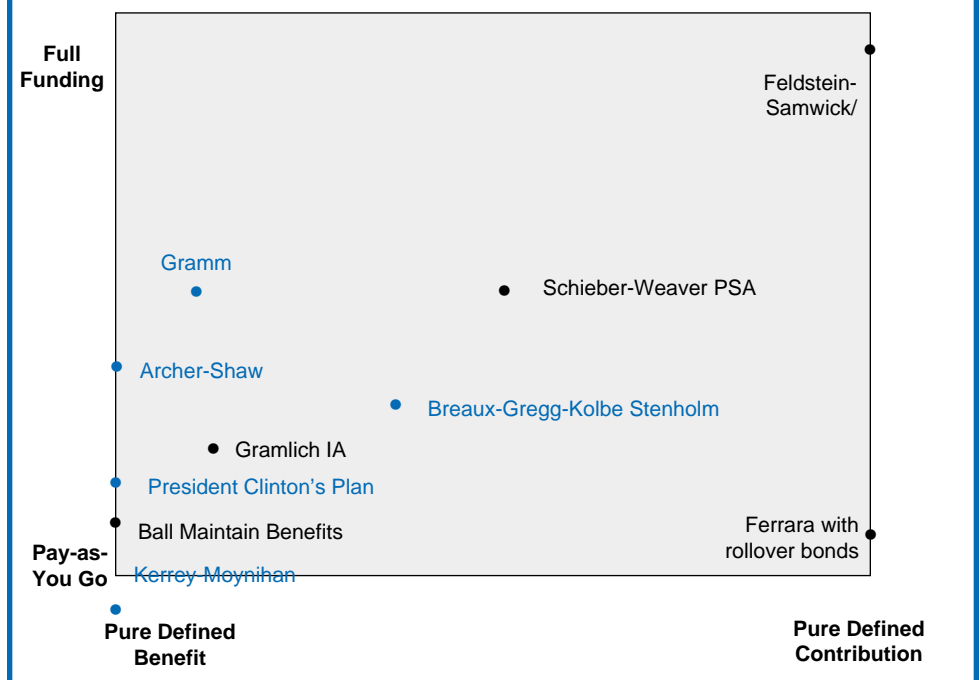
### Review of the plans

The U.S. Social Security debate is about simultaneously resolving the discussion about each of these two dimensions that define a whole policy field of choices. The graph below shows how five proposals stand with regard to four criteria: full funding vs. paygo and defined benefit vs. defined contribution. Three proposals were put forward by the 1994-1996 Advisory Council on Social Security; two others have been discussed in various public arenas.

A plan put forward at the Advisory Council by Robert Ball, former Social Security Commissioner and long-time prominent advocate of the current program, called for some small additional funding over current levels but staying with a pure defined-benefit

system. Another Advisory Council plan offered by current Federal Reserve Board member Edward Gramlich called for curtailment of the existing defined benefits that could be financed with the current OASDI payroll tax of 12.4%. These benefits would continue to be paid through the current defined-benefit system, somewhat more funded than the current system. In addition, the basic defined benefit would be supplemented by a defined-contribution plan that would be financed with contributions of 1.6% of payroll. In that regard, the combined system would be considerably more funded than under the Ball option and would provide the overwhelming majority of its benefit through a defined-benefit element and the residual through its defined-contribution element.

**Location of Specific Proposals in the Policy Field of Social Reform Options**





The Advisory Council plan that I co-developed with Carolyn Weaver, resident scholar of The American Enterprise Institute, called for half the contributions now supporting Social Security retirement benefits to be contributed to a defined-contribution account and the residual defined benefit system to be curtailed accordingly. Professors Martin Feldstein of Harvard University and Andrew Skinner of Dartmouth College have advocated a plan that would fully replace the current Social Security system with a funded defined-contribution system. Peter Ferrara of the Cato Institute has also advocated the immediate replacement of the current system with a defined-contribution system. At times, he has suggested that the immediate transition to the new system could be accomplished by granting recognition bonds to current participants in Social Security equal to the accrued value of their benefits at transition. If that were done, the immediate effect would be to create a defined-contribution system that is no more funded than the current paygo defined-benefit system. If the recognition bonds were rolled over as they matured, the system would continue to be largely financed on a paygo basis.

This same framework can be used to illustrate the proposals that are now on the table. President Clinton's proposal would retain the current pure defined-benefit structure of Social Security but increase its funding. Sens. Robert Kerrey (D-Neb.) and Daniel Patrick Moynihan (D-N.Y.) would move the system back to pure paygo financing and retain the defined-benefit status. Sens. John Breaux (D-La.) and Judd Gregg (R-N.H.) and Reps. Jim Kolbe (R-Ariz.) and Charlie Stenholm (D-Texas) would not only cut benefits back to live within the current payroll tax but carve a further benefit reduction out of the system to finance individual accounts for workers equal to 2% of covered payroll. They would fund the system to a much greater extent than

under current law, but end up with a mixed defined-benefit and defined-contribution system.

The plan that has been put forward by Reps. Bill Archer (R-Texas) and Clay Shaw (R-Fla.) at first blush may seem more like the one put forward by Sen. Breaux and his cosponsors, but it really is not. This plan has evolved under the advice of Feldstein, so again, it might seem to be partially a defined-contribution plan.

The Archer-Shaw plan would finance 2% individual accounts using budget surplus initially. But the individual accounts would be invested in a portfolio dictated by the government — through managers picked by the government — and the assets would be converted to a mandatory annuity at retirement. The annuity financed through the individual account would reduce benefits provided directly through Social Security dollar for dollar. In other words, the worker is still guaranteed a current law benefit and derives no direct added benefit from the individual account program.

To me, this proposal looks like nothing more than a gambit to allow the government to control the investment of Social Security funds in private financial markets under the guise of investment being done by individuals. The worker will still receive a current law benefit, and in that regard the benefit is defined by the existing benefit formula — i.e., it is a defined benefit. This plan should result in somewhat more funding than the President Clinton's plan.

Sen. Phil Gramm (R-Texas) has offered a variant of the Archer-Shaw proposal; Gramm's plan also was developed with Feldstein's help. His plan calls for contributions of 3% of covered pay into individual accounts. Again, the funds would be invested in a dictated portfolio that is 60% stocks and 40% bonds. Workers could pick from a set of approved fund managers, but all would be investing in a fixed portfolio with strict government restrictions on assets to be included, administration

and investment costs, and so forth. At retirement, the accumulated balance would by law be converted to an annuity. Social Security benefits from the existing system would be reduced by 80 cents for each dollar of annuity paid out of the individual account portion of the plan. The Gramm plan, like the Archer-Shaw plan, guarantees benefits equivalent to current law, and thus remains primarily a defined-benefit plan. It has a very small defined-contribution element in that the worker would, in practical terms, realize 20% of the accumulated annuity from the individual account. Twenty percent of a benefit that costs 3% of covered pay would be the equivalent of a separate defined-contribution benefit equal to 0.06% of pay.

There are a host of other proposals, some of them further to the northeast of the plans shown in blue on the accompanying graph (page 8). This forum is too restricted to review all of them, but those reviewed here should give the reader a sense of the nature of the debate that is unfolding in Washington this year. Using this framework still does not point to an optimal solution to the Social Security reform conundrum that we face. But it does begin to allow an analysis of reform options on the basis of specific sets of principles and assumptions. It is a much clearer way to think about the reform options than to talk about some of them privatizing the system while others do not, or some being radical while others are not.

**Sylvester J. Schieber, Ph.D., vice president of Watson Wyatt Worldwide, is a member of the U.S. Social Security Advisory Board and served on the 1994-96 U.S. Social Security Advisory Council. He presented a paper on this topic at the Social Security Symposium, "Impact of Social Security Privatization on Retirement Income," May 13, Ann Arbor, Mich., sponsored by the SOA and several other organizations. He can be reached by e-mail at**

# ERISA's beginnings

## Successes, failures, and the birth of a pension landmark

by Russell Mueller

*This September marks the 25th anniversary of ERISA, the Employee Retirement Income Security Act, landmark legislation that changed the face of pensions in the United States. Some of ERISA's important successes include vesting requirements, new minimum funding requirements, plan termination insurance, and enhanced disclosure rules. The biggest failure might be seen in the complexity of the current system and the resulting tremendous decline in pension plans covering small employers' workers.*

*The actuarial profession was profoundly affected by ERISA, which requires that an actuary certify to the funded status of a pension plan annually. ERISA created a group of actuaries qualified to sign these statements, the "enrolled actuaries." Russ Mueller, former actuary for the U.S. House Pension Task Force, played a role in ERISA's development and the evolution of pension law since then. He has shared with us some insights on the history of ERISA. It is particularly interesting for us to see how actuaries were a part of that debate. — Anna M. Rappaport*

According to chronicles I've kept over the past quarter century, the genesis of ERISA was the filing of recommendations made by the Committee on Public Policy and Private Pension Programs, initiated by President Kennedy in 1962. Some influential leaders supported this and similar efforts, but generally, business groups and organized labor opposed it. They saw a threat in these early efforts to legislatively rein in the flexibility of unions and companies to use pension plans as workplace incentives to retain or discharge workers.

However, in the early 1970s, a groundswell of public opinion for pension reform arose from extensive House and Senate hearings on pension losses stemming from the lack of vesting, adequate funding, and plan failures. Helping to intensify the debate were NBC's airing of "Pensions: A Broken Promise" and Ralph Nader's statement that the private pension system was the "most comprehensive fraud Americans would ever encounter."

### **Actuaries to the defense**

Prominent actuaries raised their voices to defend the private pension system. This occurred as a rebuttal to the NBC charges and the Senate Labor Committee "P-1" survey, which

focused only on system shortcomings that likened private pensions to a "10-to-1" horse race bet.

An A.S. Hansen study reached different conclusions by finding that two-thirds of covered employees would receive a vested benefit. An actuary in the General Accounting Office, Herb Feay, was highly critical of the P-1 study, as was Paul Jackson in an article for the Conference *Proceedings* (the Conference of Consulting Actuaries was once called the Conference of Actuaries in Public Practice.) An earlier study by actuaries Charles Trowbridge and Frank Griffin for the Pension Research Council found a soundly developing pension system that had vested benefits constituting more than 80% of all accrued benefits and funding levels nearing or exceeding vested accruals for the vast majority of plans. However, Sen. Jacob Javits (D-N.Y.) chaffed at the "actuarial gobbledygook." He thought it was time to stop thinking of pensions as an esoteric subject reserved for a "select priesthood of actuaries" and start thinking about them in human terms.

Based on a design that was vetted with a group of prominent consulting actuaries, the House Pension Task Force weighed in with a study conducted by Howard Winklevoss, now a

member of the American Academy of Actuaries, showing that the cost of vesting would not be prohibitive and that the three vesting formulas then under consideration (graded, 10-year cliff, and the rule of 45) were relatively equivalent system-wide. This convinced Reps. John Erlenborn (R-Ill.) and John Dent (D-Pa.) to allow plans a choice of vesting rule, a House provision that was ultimately adopted in the House/Senate conference committee.

The early efforts of the Teamsters, United Mine Workers, and others to slow reforms turned around with the shutdown of the Studebaker Corp. and firms in the steel industry. The closings led the affected unions to endorse pension reform legislation that included plan termination insurance. The fact that states had begun to enact their own differing versions of pension, and even health insurance, reform also persuaded the business community to negotiate for affordable federal provisions that would preempt state laws in the employee benefit plan area.

### **Jurisdictional battles end**

The time from introduction to passage was characterized by numerous political battles and a rocky road in a tumultuous time. Finally, Congress enacted the ERISA legislation in 1974.

With the resignation of Richard

Nixon on Aug. 8, 1974, newly installed President Gerald Ford appealed to Congress to present him with legislation that would bring the Congress and the new president together in an act of national unity. Congress complied by voting 402 to 2 in the House and 85 to 0 in the Senate to approve the ERISA conference report.

These are but a few of the events leading to the Rose Garden signing ceremony on Sept. 2, 1974, that I recall as I glance at President Ford's letter and signing pen in my office. For the remainder, you can reach me at [erisa1@erols.com](mailto:erisa1@erols.com).

**Russell J. Mueller, the former actuary and professional staff member for the House Pension**

**Task Force and Committee on Education and the Workforce, is director of health and retirement policy at the Washington, D.C., law firm of Greenberg Traurig.**

## SOA study reviews cash balance, traditional plans

by Anna M. Rappaport

**M**any organizations have been moving to cash balance plans as part of a business transformation, which has produced many winners, but also some losers. A study sponsored by the Society of Actuaries demonstrates the different accrual patterns between cash balance and traditional pension plans.

The study, "A Benefit Value Comparison of a Cash Balance Plan With a Traditional Final Average Pay Plan," used the demographic data from a major study of pension plan turnover. Researchers Steve J. Kopp and Lawrence J. Sher constructed two plans with equivalent cost and typical formulas — one traditional and one cash balance — and then calculated the benefit on termination under both formulas for each of the 259,000 vested terminations in the database. Total benefits were \$8.4 billion under either plan. The average value of the termination benefits are shown in the accompanying table.

The results showed:

- More employees (two-thirds of the total) got higher benefits under the cash balance plan. These employees terminated employment earlier than their counterparts. The average cash balance benefit was 260% of the traditional plan benefit.

- For females, the cash balance plan was better 75% of the time because of the tendency to terminate earlier.
- Employees terminating with longer service at later ages (one-third of the total vested terminations) did better under the traditional plan and received 150% of the benefit under cash balance. Only one-fourth of the women were included in the one-third of the terminations who did better under cash balance.
- Employees changing jobs several times benefit from the cash balance approach, but for those with long service in a single organization, traditional plans work better.

The study results are based on hypothetical calculations. In actual shifts

from traditional to cash balance plans, most employers substantially reduce the number of losers at time of transition by adding special transition benefits, at least for employees near retirement.

### Copies available

The study was reported in the October 1998 issue of The Pension Forum, published by the SOA's Pension Section. Copies are available for \$10 from the SOA Books Department (phone: 847/706-3526; fax: 847/706-3599; e-mail: [bhaynes@soa.org](mailto:bhaynes@soa.org)).

**Anna M. Rappaport is a principal of William M. Mercer, Chicago, and can be reached by e-mail at [anna.rappaport@us.wmmercer.com](mailto:anna.rappaport@us.wmmercer.com).**

### Average Value of Termination Benefits

	Average lump sum value under cash balance plan	Average lump sum value under traditional plan
<b>Employees with vested benefits</b>	\$22,100	\$8,300
<b>Retirees (age 56 and above)</b>	\$54,300	\$83,200

# Undeniable

## Globalization places actuarial education in new light

by Steve Radcliffe

Chair, CAS/CIA/SOA Joint Task Force on Academic Relations

**M**ajor consulting firms and many prominent insurers today clearly broadcast their international focus on their Web sites and in other corporate identity statements. Treaties and agreements such as the General Agreement on Tariffs and Trade are arising that allow products and services, including financial services, to be sold across borders more extensively than at any time in history. Technology has opened national borders to a rapid exchange of information and capital, and this means globalization is here to stay.

Countries, organizations, and professions have simultaneously been thrust into a globalized era. Developments in cross-border issues have mushroomed, often building on previous agreements and events.

It's certain that actuaries will be working in an increasingly globalized business environment. As such, actuaries often will compete for jobs in a global marketplace. Fifteen of the largest consulting firms with an international focus employ 25% of the current SOA members. What does this mean for the education and training of actuaries and for the companies that hire them?

### **Employers in the new era**

Executives, recruiters, and others remain firm in their conviction that actuarial education must retain the same high standards it has had for decades. However, as the business world becomes more global, hiring managers are recognizing that those standards are met by many actuarial organizations. Many firms already recognize the professional qualifications of actuaries who have received designations in the United Kingdom and Australia.

"In our company, we generally

recognize actuarial credentials no matter where they're gained," said Timothy J. Lynch, FSA, chairman and chief executive officer, William M. Mercer. Lynch said the exceptions are when, such as under ERISA, certain documents must be signed by Enrolled Actuaries.

"As a global firm, we've recognized that many issues in one country exist elsewhere and that we need to move professionals from one jurisdiction to another to optimize our learnings to benefit clients," said Neville Henderson, a partner in PricewaterhouseCoopers, Toronto. "As major projects arise, we find consultants working for our firm anywhere in the world who have experience in the same types of projects and send them to the new jurisdictions. So we're really trying to globalize our efforts, and part of that is making sure our consultants and professionals have as broad a base of education as possible."

Recruiter Michael J. Corey, who conducts actuarial searches for LAI Worldwide, said in an article for the July 1999 issue of *The Actuary* (U.K.) published by Staple Inn, "The dynamics of the insurance business have changed radically over the past few years, and the insurance business has become truly global. The actuarial profession is also becoming global, and, in the United States today, FIAs and FFAs are without question held in equal esteem to their North American counterparts."

### **Actuarial designations around the world**

So it's undeniable that we're seeing greater cross-border recognition of national actuarial designations. Many of those designations are earned through credit granted in part, and sometimes in total, for university course credit.

The December 1998 preliminary study of the CAS/CIA/SOA Joint Task Force on Academic Relations notes:

The CAS and SOA appear to be among the few actuarial organizations in the world using an actuarial education and professional qualification system that gives little or no formal recognition to academic work. In most countries, actuarial education and professional qualification are much more university focused.

The report also pointed out that Mexico's actuarial education and professional qualification are totally based on university training, as are those of many European countries. Both the United Kingdom's and Australia's actuarial organizations have "good experience with allowing exemptions from examinations on the basis of a limited number of accredited university programs," the report said.

Several national organizations already grant their designations to individuals belonging to another organization, usually after the person takes only one or a few actuarial exams (residency requirements are usually set, as well).

For example, the SOA gives ASA status to Fellows of the Institute of Actuaries, Faculty of Actuaries, and the Institute of Actuaries of Australia, observed the task force's preliminary report. Under the current E&E system, the SOA gives ASA status to actuaries from other countries in which university accreditation is the only qualification route, such as in Mexico, and after they pass SOA Course 150, "Actuarial Mathematics." The CAS waives the first five exams for Fellows of the British Institute and Faculty. To become an FCIA, Fellows of the Institute and Faculty must satisfy an

educational requirement, take a few exams, and have two years' Canadian experience.

In a globalized business environment, this paradox could become a major problem. How will multinational employers of actuaries, who constitute a small employment pool, handle growing needs for employees with mathematical, statistical, and modeling skills — skills that may no longer be solely the domain of actuaries? What's fair to individual actuaries (and candidates), both those who earned their actuarial designations solely through self-study and those who gained them at least in part through university credit?

#### On the march

The Education Committee of the International Association of Actuaries (IAA) issued a recommended syllabus and educational guidelines for its member countries in June 1998. The committee is now conducting a member survey to determine how its recommendations compare with the practices of actuarial associations around the world.

It has been determined, however, that IAA member associations will have to adopt the final guidelines to retain voting status in the IAA.

"The IAA's objective is to upgrade overall actuarial qualifications everywhere. In the mean time, a number of organizations are setting up or exploring the possibility of mutually recognizing each other's credentials," noted Henderson, who is chair of the SOA Task Force on Mutual Recognition (see "Meeting globalization," *The Actuary*, June 1999).

#### Serving their members

The modern actuarial profession has succeeded in part because of its high educational standards. Throughout the world, both actuaries and their employers will insist that those remain. In many countries, those rigorous standards are being met through designations based on some amount of university course credit. Actuarial organizations offering self-study as the only route to a valued designation may not be serving their members and students at the highest possible level.

The joint task force is dedicated to

the excellence of actuarial education. As such, it has taken the position that while university education should be considered, university qualification should not. Actuarial organizations should retain the responsibility of providing actuarial designations through the examination process.

Globalization will continue, and businesses will strive to meet their worldwide employment needs on the basis of needed skills. Actuaries will

compete with each other and perhaps for the first time with professionals, such as financial engineers, trained outside actuarial organizations. The world has changed and will continue to do so. Actuaries must be prepared to succeed in this new world, and to thrive in it.

**Steve Radcliffe, executive vice president, American United Life Insurance Co., can be reached by e-mail at [Steve.Radcliffe@aul.com](mailto:Steve.Radcliffe@aul.com).**

## Recent activities of the Joint Task Force on Academic Relations

### List serve

An active list serve set up to communicate with the Academic Relations Task Force saw a flurry of messages in July and August, with more questions than definite answers, on a range of topics:

- Should the SOA/CAS require a college degree as a qualification for an actuarial designation?
- How can you measure the quality of different academic actuarial programs?
- Is the E&E system an education "delivery" system or just an education "verification" system, testing whether an education occurred?

You can get in on these discussions by going to the SOA Web site ([www.soa.org](http://www.soa.org)) and under *Resources*, go to *List Serves, Public*. Simply hit the "join" button and follow the instructions.

### Speakers at ARC

Steve Radcliffe, chair of the academic relations task force, and task force member Jim Hickman led a session at the Actuarial Research Conference in Des Moines, Ia., on Aug. 8. They introduced the possibility of a stronger partnership with academia, exploring the issue of having the universities educate for actuarial science in cooperation with the actuarial profession up to a certain level. The profession would verify that education through a uniform comprehensive exam.

More task force members — Bryan Hearsey, Rob Brown, and Andre Premont — joined Hickman and SOA staff liaison Warren Luckner in a discussion with conference attendees. Topics included a reorganized listing of schools offering actuarial science programs and the pros and cons of a uniform comprehensive examination.

### New, expanded school list

One short-term goal of the task force is to reorganize the listing of colleges and universities that offer an actuarial science-related curriculum. After several months of revisions based on feedback from academics and others, the solicitation to build the reorganized listing for the year 2000 has been issued. This solicitation asks for more information than ever before to provide more meaningful information to students, faculty, the business community, and government. To see what information the task force is gathering, go to the SOA Web site ([www.soa.org](http://www.soa.org)), then to *Academic Relations*, and finally to *2000 College Listing*.

# SOA's Golden Year

## Special history sessions; new sponsors lend support

**A**tending the SOA's 50th anniversary annual meeting? You'll have the chance to look back on the history of the actuarial profession in several special continuing education sessions.

Topics ranging from technological developments to lessons learned help to explain how actuaries have gotten to where they are today, as well as forecast where things are headed. Computers have increased the speed and power of handling statistics and allowed for more sophisticated modeling than ever before, while new issues, such as AIDS and social security, have brought about new complications and new questions.

The evolution of U.S. pension benefits, funding, and payment conditions since 1949 will be explored in "Two Score and Ten Years of Pensions," session 9, Oct. 18, 10:30 a.m.-noon. Attendees will gain a greater understanding of the rationale underlying the current U.S. pension environment, including the Employee Retirement Income Security Act of 1974, the changes to the Tax Code and Department of Labor laws that followed, U.S. Social Security system revisions, and the introduction of IRA plans. Examining changes in relationships between employers and their employees, as well as pensions becoming subject to collective bargaining, attendees can develop a greater awareness of the growth and development of U.S. pensions.

The evolution of medical underwriting will be the focus of "Medical Underwriting—A Retrospective," session 100, Oct. 19, 2-3:30 p.m. The session will review innovative requirements in specific states and the resulting impact on those states' health care markets. Important topics include

genetic testing, privacy and confidentiality, and proposed limits on HIV testing. The session will shed light on what to expect in of a truly new millennium.

The potential impact of coming technologies from a perspective based on the last 50 years will be explored in "Back to the Future — Actuarial Style," session 112, Oct. 19, 2-3:30 p.m. This role-play session will feature a series of short presentations, "A Day in the Life of an Actuary." What would the actuaries of 50 years past have thought about the adding machines and desk calculators that replaced the long papers they were used to? What are we going to see in just the next few years as technology continues its explosion?

The many predictions James C.H. Anderson made during his lifetime will be the topic of "Jim Anderson's Predictions," session 124, Oct. 20, 8-9:30 a.m. Many of those predictions were accurate, but others were not. Clearly, no one can be right every time, but why is that so? The session reviews what limitations an actuary has when making predictions. To facilitate discussion, copies of the book, *The Papers of James C.H. Anderson*, and the corresponding CD-ROM are available for \$40 and \$5 respectively; contact Paulette Haberstroh, Actuarial Education and Research Fund, 475 N. Martingale Road, Suite 800, Schaumburg, IL 60173, phone 847/706-3584, fax 847/706-3599, e-mail [phaberstroh@soa.org](mailto:phaberstroh@soa.org).

Other historical sessions at the annual meeting, Oct. 17-20, San Francisco, will be:

- "Once More Unto The Breach: An Overview of the Disability Insurance Market," session 6, Oct. 18, 10:30 a.m.-noon
- "Historical Perspective on

Investment Practice," session 12, Oct. 18, 10:30 a.m.-noon

- "Nontraditional Marketing: The Next Fifty Years," session 13, Oct. 18, 10:30 a.m.-noon
- "Notable Actuarial Developments in the Last Fifty Years," session 14, Oct. 18, 10:30 a.m.-noon
- "Reopening the Great Debate: ERISA Plan Design," session 64, Oct. 19, 8-9:30 a.m.
- "Actuarial History: Here, There, and Everywhere," session 66, Oct. 19, 8-9:30 a.m.
- "Social Security-Then and Now," session 84, Oct. 19, 10-11:30 a.m.
- "Reopening the Great Debate: ERISA Funding," session 85, Oct. 19, 10-11:30 a.m.
- "Give Some Credit! The Fifty-Year History of Credit Regulation," session 103, Oct. 19, 2-3:30 p.m.
- "Reopening the Great Debate: ERISA Guarantees," session 108, Oct. 19, 2-3:30 p.m.

### Anniversary draws more sponsors

Sixty-two sponsors are giving their support to the SOA's 50th Anniversary Celebration. Several joined the roster just as the July 1 deadline approached.

### 2 new Platinum sponsors (\$50,000)

Ernst & Young LLP provides assurance and advisory business services, actuarial services, tax services, and consulting for domestic and global clients. The firm, which is the U.S. member of a worldwide organization with 82,000 people in 131 countries, has offices in 87 U.S. cities. E&Y was among the first CPA firms to hire its own full-time actuarial staff. With more than 170 credentialed actuaries in North America, Ernst & Young is a major actuarial employer and service provider.

"Ernst & Young is delighted to be a Platinum sponsor of the 50th anniversary celebration of the Society of Actuaries," said Robert W. Stein, FSA, national director of Ernst & Young's



Financial Services practice. "The Society has played an important role in the United States and worldwide in fostering the growth and establishing high educational standards for the profession. We congratulate the Society and look forward to its continuing excellence and success in meeting the challenges of the 21st century."

Swiss Re Life & Health America is the largest life and health reinsurer in North America and part of Swiss Re, one of the world's leading reinsurers. Its main focus is on traditional life and health reinsurance and on Administrative Reinsurance™, Swiss Re's solution to the high cost of administering ancillary and non-core blocks of business.

"Swiss Re is a proud sponsor of the Society of Actuaries' 50<sup>th</sup> Anniversary

Celebration. We are dedicated to the continued growth and professionalism of the actuarial career, and we are grateful to the SOA for 50 years of hard work," said Jacques E. Dubois, chairman and chief executive officer.

**5 new Silver sponsors (\$10,000)**

Buck Consultants, Inc., founded in 1916, is a leading worldwide human resources consulting firm. Headquartered in New York, the firm has 60 offices and employs more than 3,000 professionals. Buck annually ranks among the largest employee benefit consulting firms in the United States and worldwide.

"We congratulate the Society of Actuaries on its 50th anniversary," said Chairman and CEO Joseph A.

LoCicero. "Buck is proud to be one of the pioneers in the actuarial profession,

and we thank the Society of Actuaries for the invaluable role it has played in the past 50 years to build and uphold the integrity of the profession."

General & Cologne Life Re is the North American life and health arm of the worldwide General & Cologne Re group. The merger with Berkshire Hathaway Inc. presents a unique and extraordinary business model that provides General & Cologne Life Re with long-term commitment, financial resources, and a superior platform to better serve its customers. The merger creates one of the largest and strongest financial service institutions in the world.

"The SOA was founded at a time of great change following the tumultuous years during World War II," said

*(continued on page 16)*

## Sponsors of SOA's 50<sup>th</sup> anniversary celebration

**Platinum: \$50,000**

Equitable Life  
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Lincoln Financial Group  
William M. Mercer  
Milliman & Robertson, Inc.  
Swiss Re Life & Health America  
Towers Perrin

**Gold: \$25,000**

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Lutheran Brotherhood (AAL)  
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and the Merrill Lynch Insurance  
Group  
MetLife  
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Company  
Pacific Life Insurance Co.  
PolySystems, Inc.  
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Teachers Insurance and Annuity  
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**Bronze: \$5,000**

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Gabriel, Roeder, Smith &  
Company  
GenAmerica Corporation  
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Associates/J.J.&H., Ltd.  
MONY Life Insurance Co.  
Robert J. Myers, FSA  
Nationwide Financial  
Paradigm Partners International,  
LLC  
The Penn Mutual Life Insurance  
Company  
The Principal Financial Group  
The Segal Company  
SunAmerica Inc.  
Trustmark Insurance Company  
The Western-Southern Enterprise

## SOA 50th anniversary (continued from page 15)

Thomas M. West, FSA, chairman, president, and CEO. "In its 50<sup>th</sup> year, the SOA has done much to prepare the industry for the many changes that will confront us in the new millennium. For myself and my colleagues, we congratulate the Society for 50 years of leadership and vision."

Merrill Lynch, which operates in 45 countries on six continents, counts among its diversified financial services Merrill Lynch/Howard Johnson & Company (a part of GES — Group Employee Services) and the Merrill Lynch Insurance Group. They are committed to global leadership as a financial management advisory company and to setting new industry standards for a full spectrum of products and services, including total benefits outsourcing, administration and record keeping, actuarial and benefits consulting, investments, and a broad range of individual and group insurance products.

"Merrill Lynch is proud of its continued affiliation with the Society of Actuaries," said Patrick J. Walsh, senior vice president, Group Employee Services. "While we continue to expand our spectrum of services to the full range of employee pay and benefits, we look forward to an expanded relationship in the coming years."

Founded in 1868, Pacific Life provides life and health insurance products, individual annuities, and group employee benefits, and offers to individuals, businesses, and pension plans a variety of investment products and services. Over the past five years, the company has grown from the 26<sup>th</sup> to the 18<sup>th</sup> largest life insurance company in the nation. The Pacific Life family of companies manages more than \$290 billion in assets, making it one of the largest financial institutions in America. It currently counts nearly half of the Fortune 500 companies as clients.

"We are happy to welcome the Society to our home state to celebrate the achievement of its 50<sup>th</sup> anniversary," noted Tom Sutton, FSA, chairman and CEO.

Watson Wyatt brings together two disciplines — people and financial management — to help clients improve business performance. Through cost-effective compensation and benefits programs that help companies attract, retain, and motivate a talented workforce, Watson Wyatt helps clients achieve competitive advantage through their people. Watson Wyatt has more than 5,000 associates in 36 countries. Corporate offices are in Reigate, England, and Bethesda, Md.

"Watson Wyatt congratulates the Society on 50 years of excellence in serving and promoting the actuarial profession," said John Haley, president and CEO. "Its commitment to research and education over the past 50 years has been vital in helping advance actuarial skill and knowledge."

### 9 new Bronze sponsors (\$5,000)

The Allstate Life Insurance Group markets a broad line of life insurance, annuity, and group pension products through a wide variety of distribution channels. The distribution channels include Allstate agents (including life specialists), banks, independent agents, brokers, and direct response marketing. Allstate is the 16<sup>th</sup> largest life insurance company in the United States based on ordinary life insurance in force and 21<sup>st</sup> largest based on statutory assets as of Dec. 31, 1998. In sales, Allstate is one of the top 10 in ordinary amount of insurance and in the top 20 for variable sales.

"Congratulations to the SOA on its 50th anniversary," said C. Nelson Strom, corporate actuary. "As the saying goes, 'It's not how old you are but how you are old.' The SOA's past has been very successful — not only to its members, but to society at large, and its future should be even more rewarding."

EFI Companies (EFI Actuaries and its newcomer, EFI Asset/Liability Management Services) take this opportunity to recognize the actuarial profession and the Society of Actuaries, now celebrating its 50<sup>th</sup> anniversary, as the nurturing contributors to a climb

## Card contest winners

The June winners of the "Happy Birthday, SOA, Card Contest" are:

- 3-5-year old category — Falak Koreshi, grandson of Samee-Ul Hasan
- 6-9-year-old category — Samantha Petti, daughter of Toby Petti
- (No winners in the 10-12-year-old category)

The July winners are:

- 3-5-year-old category — Christina Raquel, daughter of Edwin Reoliquio Raquel
- 6-9-year-old category — Emily Andrews, daughter of Doug Andrews
- 10-12-year-old category — Robert Andrews, son of Doug Andrews

Their cards can be viewed on the SOA Web site ([www.soa.org](http://www.soa.org)).

Happy Birthday, SOA  
Card Contest

to self fulfillment of EFI professionals. EFI Companies salute:

- Alexander Norman Crowder, FSA
- Edward Harry Friend, FSA
- Robert Terry McCrory, FSA
- Mark Thomas Ruloff, ASA
- Chester Ray Schneider, FSA
- Ira Michael Summer, FSA

One of the nation's oldest and largest mutual insurers, The Guardian Life Insurance Company of America offers a full range of financial products and services, including individual life and disability income insurance, employee benefits, pensions, 401(k) plans, and asset-accumulation products. It employs over 5,000 people nationwide in its New York home office and four regional offices.

"On behalf of Guardian, I would like to extend my congratulations to the Society of Actuaries on reaching its 50th year," said Armand de Palo, senior vice president and chief actuary.



"The Society has a long and proud history of supporting actuarial education and research. Guardian is delighted to honor an organization so critical to the success of our company and the development of our industry."

Founded in 1971, with offices in Chicago, Atlanta, Philadelphia, and Dallas, Jacobson Associates/J.J.&H. Ltd. is a nationally recognized executive search firm providing comprehensive services to the insurance industry. Margaret Resce Milkint, executive vice president, joined the firm in 1985 and directs its actuarial practice as well as leading retained searches for insurance and financial services executives on a worldwide basis.

"The Society of Actuaries provides a forum for career development that is unmatched in the insurance arena. Congratulations and thank you for your significant contributions to the industry," said Milkint.

Liberty Mutual Group is a diversified international financial services company employing 37,000 people in more than 900 offices throughout the world. One of the largest multi-line insurers in the property/casualty field, Liberty Mutual has been the leading provider of workers compensation insurance, programs, and services for more than 60 years. Liberty Mutual is based in Boston, where it has been in the business of helping people live safer, more secure lives since its founding in 1912.

"We at Liberty are pleased to join the Society of Actuaries and all its members in celebrating 50 years of dedicated professionalism and service to the economic community," said Edmund F. Kelly, FSA, president and CEO. "We congratulate the Society for the work of its membership in developing and putting into practice new financial and economic concepts, all the while maintaining the strong ethical underpinnings that have always been such an important aspect of the actuarial profession."

MONEY Life Insurance Company, which provides life insurance nationwide and annuities in New York, is a New York-domiciled stock life insurer that was founded in 1842 as The

Mutual Life Insurance Company of New York and issued the first mutual life insurance policy in the United States in 1843. It is the principal subsidiary of The MONEY Group Inc., which, through its member companies, provides financial protection and asset accumulation products and services.

"The MONEY Group is pleased to be a sponsor in recognizing the Society's 50<sup>th</sup> anniversary," said Phillip Eisenberg, FSA, chief actuary. "As a company with a history of more than 150 years, we are proud to have been a part of the Society's past, including having Sheppard Homans, a MONEY actuary, as the first president of the Actuarial Society of America, one of the precursors to today's Society. We also look forward to the Society's role in the continuing development of current and future actuaries."

Founded in 1939, The Segal Company celebrates its 60th anniversary this year. The company serves as consultants and actuaries for employee benefit, compensation, and human resources programs. It provides a complete range of services for the design, implementation, and costing of programs such as pension and profit sharing plans, health benefit plans, and total compensation plans.

"Congratulations to the Society of Actuaries on its 50<sup>th</sup> anniversary," said Howard Fluhr, FSA, president and chief executive officer. "The rigors of the SOA's actuarial education and standard-setting provide a powerful platform for both professional satisfaction and high-quality client service. We are proud to participate in this occasion and look forward to continuing our involvement into the next millennium."

Trustmark Insurance Company is a leading mutual insurer and benefits administrator licensed nationwide to offer a full line of life, medical, managed care, disability, long-term care, and dental products to individuals and groups. Trustmark and its subsidiaries employ more than 3,200 people in 58 U.S. offices.

"On behalf of all the actuaries at Trustmark, congratulations to SOA

on 50 great years," said Donald M. Peterson, FSA, chairman. "We value the educational and informational opportunities that the SOA has provided through the years and look forward to an equally rewarding relationship with the organization during the next 50 years."

The Western-Southern Enterprise is a Cincinnati-based group of financial services companies providing life insurance, annuities, mutual funds, asset management, and other related financial services for millions of consumers nationwide. The Enterprise parent company, The Western and Southern Life Insurance Company, was founded in 1888, and today operates in 43 states and the District of Columbia. With \$18 billion in assets owned or under management as of June 1999, the Enterprise also includes the Western-Southern Life Assurance Company; Columbus Life Insurance Company; Capital Analysts Incorporated; Fort Washington Investment Advisors, Inc.; Todd Investment Advisors, Inc.; IFS Financial Services, Inc.; Touchstone Advisors, Inc.; Touchstone Securities, Inc.; and Eagle Realty Group, Inc.

"The Society of Actuaries has made a tremendous contribution to our industry over the past 50 years, and we look forward to another 50 years of continued involvement," said president and chief executive officer John F. Barrett.

**This story was compiled by SOA staffers Cecilia Green, Jacqueline Bitowt, and Brian Howard.**

### October SOA board meeting

All members are invited to attend the SOA Board of Governors meeting, 8 a.m. to 4 p.m. Sun., Oct. 17, at the San Francisco Marriott. For more information, call the SOA at 847/706-3500.

# RESEARCH CORNER

## Ph.D. grants

The CAS/SOA Ph.D. Grants Task Force awarded one initial grant for the 1999-2000 academic year. The recipient is Yu "Jack" Luo of the University of Wisconsin for his study, "Modern Statistical Methods in Credibility Theory," being funded by the CAS.

Four students were awarded grant renewals: Kevin Ahlgrim, University of Illinois, "Consolidating Risks in the Asset/Liability Management Process of Life Insurers"; Christiane Lemieux, University of Montreal, "Variance Reduction by Quasi-Monte Carlo Methods in Simulation"; Serena Ee Ik Tiong, University of Iowa, "Deferred Annuity"; and Barbara Remmers, New York University, "Essays on Financial Aspects of Insurance."

## CKER Grants

The Committee on Knowledge Extension Research (CKER) recently funded the following research projects: "Practical Implementation of the Mixture of Exponentials Model," Stuart Klugman and Jacques Rioux; "Valuation of Equity-Indexed

Annuities Under Stochastic Interest Rate," X. Sheldon Lin; and "Actuarial Aspects of Dependencies in Insurance Portfolios," Jan Dhaene.

## The Edward A. Lew Award

The CKER has awarded the Edward A. Lew Award for modeling to Hans Gerber for his proposal, "Dynamic Asset Allocation and Optimal Investment Strategies." This project is expected to be completed by March 1, 2000.

## Health news

The Committee on Health Benefit Systems Research approved the report by Dennis P. Scanlon, Ph.D., and Michael Chernew, Ph.D., "Managed Care and Performance Measurement: Implications for Insurance Markets." The report is now available through the SOA Books Department for \$10. It also has been posted on the SOA Web site. In addition, the report has been submitted to the *North American Actuarial Journal (NAAJ)* for possible publication.

## Retirement news

The final report of the project, "Survey of Asset Valuation Methods for Defined Benefit Pension Plans," is now available through the SOA Books Department for \$10 and has been posted on the SOA Web site. The report also has been submitted to the *Pension Forum* for possible publication.

The Retirement Plans Experience Committee approved the report by the University of Connecticut research

team, "Multivariate Analysis of Pension Plan Mortality Data." This report is now available through the SOA Books Department for \$10 and has been posted on the SOA Web site. In addition, the report has been submitted to the *NAAJ* for possible publication.

## Finance news

The SOA Committee on Finance Research agreed to partially fund the Bowles Symposium, "Financial Services Integration: Fortune or Fiasco?", to be held Dec. 6-7, at Georgia State University. Additional information can be found at [www.rmi.gsu.edu/bowles/b-chair.htm](http://www.rmi.gsu.edu/bowles/b-chair.htm).

The committee is also partially funding mailing costs for the Canadian Institute of Actuaries' "Symposium on Stochastic Modeling for Variable Annuity/Segregated Fund Investment Guarantees," Sept. 13-14, Toronto Airport Hilton Hotel. Details can be found at [www.actuaries.ca/publications/notices/9922e.html](http://www.actuaries.ca/publications/notices/9922e.html).

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**SOA research reports may be purchased through the SOA Books Department (Beverly Haynes: phone, 847/706-3526; fax, 847/706-3599; e-mail, [bhaynes@soa.org](mailto:bhaynes@soa.org)). Some also are posted on the SOA Web site ([www.soa.org](http://www.soa.org), *Research*).**

## Journal offers prizes for papers

**T**he *Journal of Actuarial Practice* has announced its annual contest for papers "geared to enhancing the education and/or training of actuaries," noted Colin M. Ramsay, editor.

Prizes are \$1,000 for the paper chosen as best, \$500 for second place and \$250 for third.

Abstracts are due Nov. 15, full papers by Jan. 15, 2000. Details are available on the Web at

[www.absalompress.com](http://www.absalompress.com) or from Ramsay (phone: 402/421-8149; fax: 402/421-9190; e-mail: [absalom1@ix.netcom.com](mailto:absalom1@ix.netcom.com); mail: P.O. Box 22098, Lincoln, NE 68542).

## Foundation honored for math mentoring program

**T**he Actuarial Foundation has received a Summit Award, the top honor given by the American Society of Association Executives (ASAE), Washington, D.C., as part of its national campaign, "Associations Advance America."

The Foundation was honored for its math tutoring and mentoring program for elementary school children, "Advancing Student Achievement." Only nine winners were selected from 243 entries for the Summit Award, which honors associations for innovative projects in education, skills training, standards-setting, business and social innovation, knowledge creation, citizenship, and community service. The ASAE is producing a video featuring the award-winning programs

to encourage development of programs with similar qualities.

"Advancing Student Achievement" recruits actuaries to serve as mentors and tutors to children in grades K-8. The program also provides grants to schools seeking to develop such tutoring and mentoring plans.

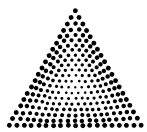
"This program truly embodies the spirit of the Associations Advance America campaign. It is an honor and an inspiration to showcase your activities ... as examples of the many contributions associations are doing to advance society," said Michael S. Olson, president and CEO of ASAE, in notifying the Foundation.

"This kind of recognition is a great help to us in letting schools and communities know about our program, and equally important, how they can start their own similar types of tutoring and mentoring activities,"

said Cecil Bykerk, chair of The Actuarial Foundation. "We thank the ASAE for this honor and opportunity."

The four-year-old "Advancing Student Achievement" program is being used by schools in seven U.S. cities and in rural Alberta, Canada. Its newest project is in partnership with Junior Achievement. Actuaries will help build the economics curriculum in Junior Achievement's "virtual high school." Ultimately, this innovative educational program will allow people who cannot attend school physically, or who have quit school and wish to earn their diplomas, to finish their high school requirements online.

Information on "Advancing Student Achievement" and The Actuarial Foundation is available from Joseph Abel, the Foundation's director of development and marketing (phone: 847/706-3557; fax: 847/706-3599; e-mail: [jabel@soa.org](mailto:jabel@soa.org)).



**THE ACTUARIAL FOUNDATION**  
*Preparing for tomorrow's possibilities*

### 6 medals for U.S. math team

*Two gold medals were among the six won by members of the U.S. Mathematical Olympiad team at the 40<sup>th</sup> International Mathematical Olympiad. This competition for high school-level students from 81 countries was held July 16-17 in Bucharest, Romania. Posing at the Einstein statue in Washington, D.C., are U.S. team members (L to R) Stephen E. Haas (alternate), Reid W. Barton, Po-Shen Loh, Lawrence O. Detlor, Gabriel D. Carroll, Paul A. Valiant, and Melanie Eggers Wood. (Not pictured is Sasha Schwartz, who was unable to attend the international event.) At far right is Joe Applebaum, representing the SOA, a sponsor of the U.S.A. Mathematical Olympiad with 14 other organizations including the Mathematical Association of America.*





## on the lighter side

### One musician's tale, and his Tony Bennett gig

by Jacqueline Bitowt  
SOA Public Relations Manager

What actuary Bill Feldman remembers as his “15 minutes of fame” 30 years ago recently danced to the front of his mind. Learning that Tony Bennett would entertain at the Society's 50th Anniversary Annual Meeting, Feldman felt a sudden burst of nostalgia.

That's because he played baritone saxophone for Tony Bennett in two 1969 concerts. “I occasionally introduce myself as probably the only actuary who has performed professionally with Tony Bennett,” he said.

Feldman plans to be in the audience when Bennett performs at the gala dinner on Tues., Oct. 19. The last time Feldman saw the renowned entertainer in person, Bennett was posing with VIPs after a St. Louis concert in which Feldman was part of his “big band.”

#### The Swingin' Padre, and a college jazz band

The story begins at Notre Dame High School in a Chicago suburb. Feldman was a member of a talented jazz band led by a memorable mentor, Rev. George Wiskirchen, known as the “Swingin' Padre” in jazz circles.

Just how good was the group? “Two band members have become nationally known musicians,” Feldman said. They are pianist Jim

McNeely, recently nominated for a jazz Grammy and a regular at New York's famed Village Vanguard club; and trombonist Jim Pankow, an original member of the '60s rock group Chicago who still performs with them.

So it was no surprise that Feldman continued on his extracurricular musical route while a math student at the University of Illinois at Urbana. Auditions placed him in the best of the school's three jazz bands, the University of Illinois Jazz Band, by sophomore year. “I was the only non-music major in the group,” he said, and he continued playing through his master's degree program.

“We played the Newport Jazz Festival. We backed up Sarah Vaughan at the New Orleans Jazz Festival and Maynard Ferguson at the Prague Jazz Festival.” In 1969, the group became only the second big band and the third jazz group to perform in the Soviet Union. “The first big band was Benny Goodman's, 10 years earlier.”

#### Encountering Tony

Feldman was 22 years old and in a math master's degree program at the University of Illinois. A former band member, then a Los Angeles studio musician, sent word that musicians were needed for part of Tony Bennett's concert tour in Detroit and St. Louis. “It was that old story — I was in the right place at the right time,” Feldman recalled. “The core of the band was from L.A.”

On a spring Saturday in 1969, several young musicians from the Midwest boarded various planes for Detroit. Feldman was one, “and wouldn't you know it, the airline lost my sax.” So in rehearsal — where Tony Bennett listened but did not sing — Feldman played his other instrument, a bass clarinet. “About halfway through rehearsal, someone from the airline showed up backstage with my saxophone,” and Feldman continued more comfortably.

The band — with 16 musicians, standard big band size — was led by Louis Bellson, a legendary jazz

drummer in his own right but also famous as the husband of Pearl Bailey. Also among Feldman's once-in-a-lifetime colleagues were Harry “Sweets” Edison, “a trumpet player who performed with Count Basie for many years,” and Pete Chrislieb, tenor sax player in Doc Severinsen's “Tonight Show” band.

The Detroit audience was enthralled and thrilled by Bennett's performance, Feldman said. “Of course, he sang ‘I Left My Heart in San Francisco.’ That was at the height of its popularity.” The star also sang “In Other Words” (better known as “Fly Me to the Moon”), “The Trolley Song” (“Clang, clang, went the trolley”), and “For Once in My Life.”

After the concert, “the musicians got on a bus for St. Louis, and Tony Bennett got on a plane. You know how that goes,” Feldman laughed.

In St. Louis' Kiel Auditorium, “we were already well-rehearsed, and the concert came off really great,” Feldman recalled. “After it was over, I walked over to Tony Bennett, an extremely nice person. I shook his hand and said it was a real pleasure playing with him. Then the photographer came over — and pushed me out of the way to make room for the VIPs. Tony just rolled his eyes and shrugged his shoulders as if to say, ‘What does my opinion count? I'm just the star, along for the ride.’”



*Feldman's promotional photo from the 1960s shows him as he looked backing songster Bennett.*

### The Bennett style

If there's one thing Feldman remembers about Bennett as a musician, it's his ability to "hold the audience."

"When he got into a ballad, you could hear a pin drop," Feldman said. "I know they felt, 'He's singing right to me.' It's the way he bows and accepts applause. There's real sincerity and humility."

Behind that is something deeper, Feldman recalled. "People understand that he's a real person, not some kind of Hollywood phony — and it comes through in his music. He sings songs he believes in, that are consistent with what he is and what he feels."

### A new life

Feldman finished his master's program and eventually began seeking a career in earnest. "I was looking to be a teacher, but in 1973, there weren't any teaching jobs available. However, there were actuarial jobs." He already had taken the first two actuarial exams "as a fallback," and the rest is history. He joined Combined Insurance in 1973 and then moved to his current employer, now named PricewaterhouseCoopers, in 1985.

## Music and actuaries

**B**ill Feldman is far from alone in his involvement with both music and actuarial science. David M. Holland, 1996-97 SOA president, is a devoted singer (a classical baritone), and guitarist Doug Smith, ASA, owns a recording studio and heads a nonprofit group supporting music education for children.

*The Actuary* would like to showcase actuaries' musical lives in an upcoming article. If you play an instrument, sing, or are involved with music in any active way (listening doesn't count), let us know. Forward your name and a few comments about your musical history to Kelly Mayo, SOA public relations/marketing coordinator, *The Actuary* (fax: 847/706-3599; e-mail: [kmayo@soa.org](mailto:kmayo@soa.org); mail: Society of Actuaries, 475 N. Martingale Road, Suite 800, Schaumburg, IL 60173).

But through all those years, Feldman kept on playing in bands, although it faded dramatically "as the actuarial exams and family became more important."

Where does Feldman perform today? "I've been known to play at our department's Christmas party," he said. So for Feldman, the 15 minutes of fame continue, at least seasonally.

**Bill Feldman, senior consultant,**

**PricewaterhouseCoopers LLP, Chicago, knows that many actuaries are or have been musicians, and he wonders whether others have played with Tony Bennett "or had other great gigs." He is interested in hearing from them, "so we can compare notes." He can be reached by e-mail at [william.t.feldman@us.pwcglobal.com](mailto:william.t.feldman@us.pwcglobal.com).**

## Spec Fic tells tales both fun and insightful

Jacqueline Bitowt  
SOA Public Relations Manager

**T**he third edition of *Actuarial Speculative Fiction* (also fondly known as Spec Fic, version 3.0) is available now, and with it some deep insights and weird, fun stories.

"Spec Fic turns the actuarial stereotype upside down," said editor Carol Marler. "Who would have thought that the 'boring' actuarial mind could harbor such strange ideas? You have to read it to believe it."

As with the first two versions, the third features stories submitted in a

competition sponsored by the SOA's Computer Science Section. The author of the first place story, "Computer Graphics," listed only as C.V., received a \$250 prize. "Computer Graphics" is posted on the SOA's Web site ([www.soa.org](http://www.soa.org), *Special Interest Sections, Computer Science Section*), as is the table of contents.

The remaining eight stories in the 94-page issue were authored by Marilyn Dunstan, Chris Fievoli, G. Lee Giesecke, Walt Herrington, David Kroll, Gary Lange, Marler, and

Jim Toole.

Once again, the stories were judged by Robert Mielke, Ph.D., associate professor of English, Truman State University, Kirksville, Mo.

Copies have been sent to all Computer Science Section members. Others can obtain a copy free of charge from Joe Adduci at the SOA office (phone: 847/706-3548; fax: 847/706-3599; e-mail: [jadduci@soa.org](mailto:jadduci@soa.org)).

## Fall exam prep seminars

### Broverman seminars

Exam preparation seminars for the November 1999 exam period will be held in October and November in Chicago, New York, and Toronto for Courses 120, 130, 135, 140, 150, 151 and 160. Details are available from Professor Sam Broverman, University of Toronto (phone: 416/978-4453 or 416/966-9111; e-mail: [sam@utstat.toronto.edu](mailto:sam@utstat.toronto.edu)). Updated information is also available on the Web at [www.interlog.com/~actexam](http://www.interlog.com/~actexam).

### Correction

The e-mail address for James Daniel, instructor of the Austin 150 course, was printed incorrectly in the June issue of *The Actuary*. The correct address is [lonestar.texas.net/~adaniel/sem/austin\\_actuarial\\_seminars.html](mailto:lonestar.texas.net/~adaniel/sem/austin_actuarial_seminars.html).

### Editorial board meets

Members of *The Actuary's* 1999-2000 editorial board met on July 27 in Chicago to plan for the upcoming year's issues. They also observed the traditional passing of the editorial hat (a baseball cap) from outgoing Editor Bill Cutlip to his successor, Bob Shapiro. Shown are (L to R) Craig Kalman, Mo Chambers, Godfrey Perrott, Anna Rappaport, Jay Novik, and Jan Carstens.



## The Actuary gets new editor in chief

**R**obert D. Shapiro is *The Actuary's* new editor in chief for the 1999-2002 term of office. He replaces William C. Cutlip, whose three-year term ended this summer.

As an associate editor of *The Actuary* from January 1994 to July 1999, Shapiro focused on cutting-edge topics in the life insurance industry and finance.

Shapiro has served three times on the SOA Board of Governors, 1978-81, 1982-84, and 1992-95. His many SOA commitments have included serving as chair of the SOA Task Force on the Actuary of the Future and a member of the SOA Board Task Force on Education. He is currently a trustee of The Actuarial Foundation, and he was the 1989-92 chair of the American

Academy of Actuaries Task Force for Actuarial Appraisal Standards.



*Robert D. Shapiro*

A consultant and investment banker in private practice, Shapiro writes frequently about merger and acquisition activity in life insurance. He has had more than 50 papers and articles on life insurance topics published in professional journals and industry publications.

## Faculty opening at the University of Calgary

**Position:** Several tenure track positions at the rank of assistant professor in the Department of Mathematics and Statistics, University of Calgary, beginning July 1, 2000.

**Qualifications:** Research expertise complements programs in discrete mathematics, actuarial science/financial mathematics, modern PDEs

and dynamical systems, applied/biostatistics and algebra. Applicants interested in the computational aspects of these areas are especially sought. In accordance with Canadian immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada.

**Application:** Deadline is Jan. 15,

2000. For details, contact the Search Committee, Department of Mathematics and Statistics, University of Calgary, 2500 University Drive NW, Calgary, Alberta, T2N 1N4, or see the notice at [www.math.ucalgary.ca/departement/jobs.html](http://www.math.ucalgary.ca/departement/jobs.html).

## DEAR EDITOR

**Remembering  
Andy Webster**

Thank you to Bill Cutlip for rekindling my memories of Andy Webster ("Today's editor remembers the first," *The Actuary*, May 1998). I, too, was touched by that Scottish twinkle and caring man.

As a young actuarial student at Mutual of New York, I stumbled into the actuarial library one morning to find a frail man balancing on a make-shift ladder of books piled on a chair while attempting to reach a volume on the top shelf. He welcomed my offer of assistance as he explained that he couldn't locate a ladder and simply must have a certain book to help him research something I'm sure I still

wouldn't understand. We chatted for almost an hour as he explained his project. His enthusiasm was immeasurable, and I listened attentively as he attempted to educate me in the subtleties of this actuarial mystery. He gently asked about my interests and my dreams of beginning my career. His words of encouragement still ring true.

His wisdom and his caring at a time when I was starting down my lifetime's path set me on the right road. Like Bill Cutlip, I have tried to walk in his footsteps by helping other actuaries. I feel honored to have shared a life's moment with a most remarkable man.

**Art Tepfer**

**Vive les actuaires**

In the popular book, *Encore Provence*, Peter Mayle gives a nod to actuaries.

He refers to the French arrangement of selling one's home *en viager*, describing the process as follows: "You sell the house at a price below the full market value, but with yourself included as a fixture, having the right to continue in residence for the rest of your life."

He goes on to cite the case of a woman who sold her house that way when she was 90. She outlived the buyer by not dying until age 117. Mayle writes that the woman was "one of those blips that spoil the symmetry of actuarial statistics."

**Howard Young**

## IN MEMORIAM

**Harry Atrubin**

FSA 1930, FCIA 1965

**James M. Gill**

FSA 1958, FCIA 1965

**Marilyn Hughes**

FSA 1976

**Jeffery Earl McGill**

ASA 1968

**William E. Moody**

ASA 1959, MAAA 1967,  
FCIA 1969, MSPA, 1993

**Charles L. Trowbridge, FSA 1946, MAAA 1965**, died July 3. He was 1974-75 Society president and served for 11 years on the SOA Board of Governors. As president, he called the first meeting of the Actuarial Education and Research Fund. He was 1983-86 editor in chief of *The Actuary*, and he chaired the first Pension Section Council in 1983. He is best

known for his authorship of the monograph, "Fundamentals of Actuarial Science," issued during the U.S. profession's centennial year, 1989. His other organizational activities included serving on the American Academy of Actuaries' board of directors and involvement with the Pension Research Council.

He served as chief actuary of the U.S. Social Security Administration, 1971-73, but devoted most of career to the pension operations of Banker's Life of Iowa (now the Principal Financial Group). He joined the company in 1938 and rose to the position of senior vice president, the post he held when he retired in 1979. He then became professor of actuarial science at the University of Michigan, 1979-83.

**John E. O'Connor, Jr.**, executive director of the Society of Actuaries and The Actuarial Foundation, died June 15. During his 20 years as the head of the SOA staff, membership nearly tripled and the organization gained international respect for its many

comprehensive education and research programs. During his tenure, the number of committees nearly doubled; 15 special interest Sections were created; the operating budget increased from \$1.6 to \$16 million; the number of staff grew from 15 to 87 and was strengthened by the addition of nine FSA positions, three staff members with doctorates, three certified association executives, and two certified public accountants; the first overseas SOA office was established in Hong Kong; and The Actuarial Foundation (formerly the Society of Actuaries Foundation) was established.

A career association executive, O'Connor served the Association Forum (formerly Chicago Society of Association Executives) in several capacities including as an elected member of its Board of Directors. In 1988, the CSAE honored him as "outstanding CEO" with the Samuel B. Shapiro Award, which recognizes outstanding service and accomplishment in association management.

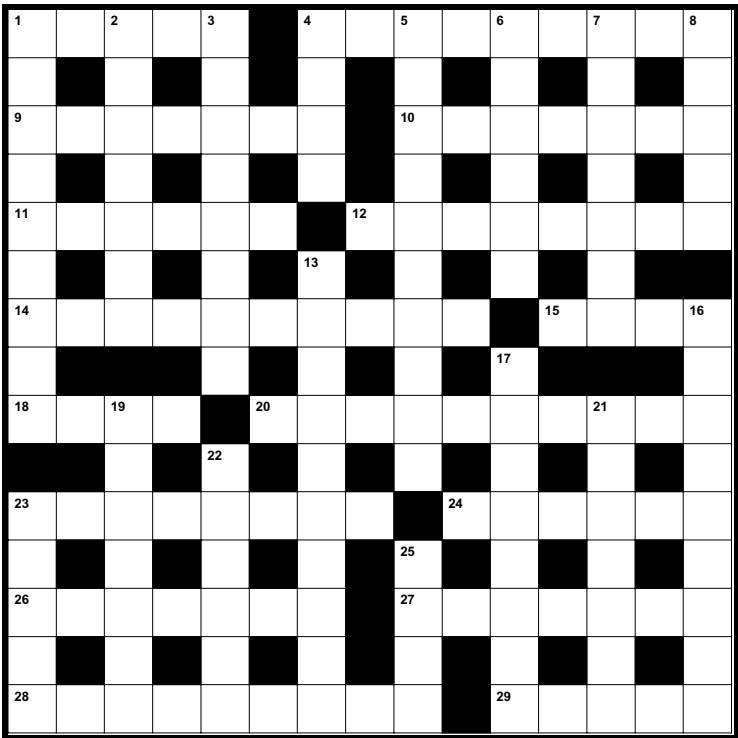
## CONTEST PUZZLE #23: ACTUCROSSWORD — By Louise Thiessen

**ACROSS**

- 1 Beginnings of much ado follow incorrigible actions of infamous families (5)
- 4 Hospitalized bride reevaluated initial dissatisfaction with hideaway (9)
- 9 Even now, Gore prepared (7)
- 10 New padre is honored (7)
- 11 Arrogant sympathy follows raise (6)
- 12 Broad scope primarily for officers (8)
- 14 Andrew's sin complicated familiarity (10)
- 15 Still listening to hero (4)
- 18 Fast spinning wheel placed in dingy robot (4)
- 20 Trim seaman changed direction of current (10)
- 23 Swooped down on final joint (8)
- 24 Office dresser (6)
- 26 Perfume, once damaged is without reckoning (7)
- 27 Drum has broken amp in it (7)
- 28 Scattered press edited amidst deceased (9)
- 29 Edge of rubber grid lies next to tip of electrode (5)

**DOWN**

- 1 I'm sure nag ruined estimation (9)
- 2 Golfers yell, grab wildly at certain dog leg!(7)
- 3 Commercial-appropriate choices for transformers (8)
- 4 Procures passes over the phone (4)
- 5 Top parts of epidermis under bandage are discouraging (10)
- 6 Pictures game is foolish (6)
- 7 Separate group trailed Caesar going west (7)
- 8 Head bobs that include a little enthusiasm lead to knots (5)
- 13 Furtive atmosphere as Nike rebuilds next to Cape.(10)
- 16 Leo, I'm in U.S. made luxury car (9)
- 17 Shania Twain joins up with uninitiated drummer and guitar player (8)
- 19 Rises up against resistance's first two electrical charges (7)
- 21 Mad leer cast at gemstone(7)
- 22 Smoke: it goes meandering (6)
- 23 Checked out about 100<sup>3</sup> ? (5)
- 25 Dust settles for sex object (4)



February solution: Tomorrow is resplendent with golden opportunity. The problems ahead are not beyond the scope of the human mind if we face them courageously. The frontiers of heart and mind are endless. We can, we must find the way forward as free men unafraid of the journey to the endless horizons. President McConney (SOA 1949-50), Transactions.

**February 100% Solvers:**J.Aldritt, W.Allison, D.& W.Apps, R.Alexander, B.Avant, K.Baker, S.Bickel, A.Buckley, L.Cappelano, S.Charters & D. Dobbin, O.Chow, R.Collingwood & A.Lye, T.Collins, S.Colpitts, A.Coutts, M.Culp, J.Dalessio &A.Dierdorf, M.Eckman, H.Fishman, R.Fleckenstein & P.McEvoy, N. Franseschine, C.Galloway, R.Garfield, P.Gollance, B.Graham, J.Grantier, S.Gruhlke, J.Hackard, G.Horrocks, G.Hosfield, M.Kerbel, O.Karsten, S.Keyes, I.Khaw, B.&J.Koch, H.Leff, C.Linn, S.Loffree, W.Lumsden, M.Lykins & J.O'Connor, M.MacKinnon, J.Manko & B.Szuta, S.& L.Maramo, , R.Martin, J.McIntosh, S.Menditto, R.Miller, B.Mullen, L.Nagle, C.Ogburn, C.Poirier, D.&C.Promislow, L.Rae, G.Ronczy, M.Ross, I.Schaeffer, A.Schallhorn, E.Schembari, S.Shaw, G.Sherritt, J.Shiley, S.Simone, M.Spevacek, W.Steffen, T.Swanky, S.Tarrant, H.Tate, E.Thompson, E.Tittley, M.Vandesteeg& A.White, E.VanTilburg, C.Velasquez, P.Watkin, J.Wilkis, R.Wilton, P.Zelakoski, F.Zaret

**Congratulations to Larry Rae, This month's winner of a Famous Solver of ActuPuzzles mug!**

Send solutions to: Puzzle Editor, 753 Revell Crescent, Edmonton, Alberta, Canada T6R 2E8; EMAIL [thiessen@v-wave.com](mailto:thiessen@v-wave.com)

