The Newsletter of the
Society of Actuaries
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THE Actuary

Centennial celebration draws near

by Ian M. Rolland

The gala Centennial Celebration June 12-14 in Washington, D.C., will mark a century of challenge, growth, and achievement for the actuarial profession in North America.

At this landmark meeting, we will take a thoughtful look at our profession's past and make some exciting projections into our future. Sponsoring organizations are the American Academy of Actuaries, Canadian Institute of Actuaries, Casualty Actuarial Society, Conference of Actuaries in Public Practice, and Society of Actuaries.

Our profession has evolved dramatically over the past 100 years. Once working primarily in individual life insurance, actuaries now influence major corporate and public policy decisions in many areas. They are increasingly called upon to address diverse social and economic problems.

The meeting theme, "Challenges to the Actuarial Profession," will help us prepare for continued growth of our profession's influence in a rapidly changing environment.

These challenges will be explored through three morning panel discussions, each followed by afternoon breakout sessions. The June 12 panel, "The Challenge from Within," will address the ideas and concepts that will challenge the profession in the twenty-first century. On June 13, a panel discussion on "The Challenge from Without" will focus on how the actuary of today must change to meet tomorrow's challenges from employers, regulators, and other professions. The

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Integration of qualified plans with U.S. Social Security

by Donald S. Grubbs, Jr.

The U.S. Internal Revenue Code prohibits qualified pension and profit sharing plans from discriminating in favor of highly compensated employees. It states that a plan is not discriminatory merely because contributions or benefits are a uniform percentage of pay. In addition, the code allows some disparity between highly compensated employees and other employees with respect to their contributions or benefits as a percentage of pay. This provision recognizes that employers pay taxes to fund benefits under Social Security and that both contributions and benefits under Social Security are a smaller percentage of compensation to highly compensated employees. Plans that incorporate such a disparity in the contributions and/or benefits are referred to as "integrated plans."

The Tax Reform Act of 1986 substantially changed the requirements regarding the allowable disparity in integrated plans, adding subsection 401(l) to the Internal Revenue Code. Minor changes to these requirements were enacted as part of technical corrections legislation on November 10, 1988, but these had been indicated by the Joint Committee on Taxation 18 months earlier and came as no surprise to those persons following the issue. These new rules apply to plan years beginning in 1989.

Regulations were essential in order for employers to know how to implement the new requirements. Recognizing that employers would need substantial lead time to amend their plans and be prepared to process actual benefit payments by January 1989, the 1986 statute required that the Secretary of the Treasury publish final regulations concerning integration before February 1, 1988. The Secretary of the Treasury, who failed to meet this deadline, published proposed regula-

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Integration cont'd

tions November 15 under Code section 401(1).

Some time in 1989 a public hearing will be held on the proposed regulation, and many persons will want to submit comments. Even the eventual final regulations apparently will not provide employers and their advisors with the information needed to determine their options. The proposed regulations under section 401(1) would provide a narrow path an employer may follow to have an integrated plan, but also would allow many other paths. However, the alternative paths will be described only in new regulations under section 401 (a) (4), which are expected to be issued in proposed form next summer and later in final form.

As this is written in December 1988, many employers believe that they lack the information needed to make appropriate decisions or that it is not possible to make any changes by January 1 even if they now know what to do. While it will be possible to adopt plan amendments as late as the end of the plan year beginning in 1989 and make them retroactive to the beginning of the year, this presents two problems. One problem is that appropriate changes may require a decrease in benefits accrued after January 1, 1989, but ERISA's anticutback rule prohibits any decrease. The second problem relates to the necessity of paying benefits – in the form of either a monthly annuity or a lump sum distribution – to employees who retire or otherwise terminate employment early in the year. If the payment is later determined to be too large, will the employer need to try to collect the excess or have the plan disqualified?

On December 13, the Internal Revenue Service, aware that the lack of timely guidance has created a major problem for employers, announced that for a temporary period certain cutbacks will be allowed and that certain payments exceeding the integration limits will be permitted. This provides some temporary relief as far as compliance with the code is concerned, but does not exempt the plan from any claim by a participant whose benefit is cut back.

Congress stated that a goal of the new requirements was "simplifying the integration rules," but the regulation writers apparently overlooked this statement. The proposed regulation brought many surprises, even to those who had followed the developments closely. One surprise relates to the "integration level" for defined benefit excess plans. (The percentage benefit related to compensation above this level may exceed the percentage benefit below it.) Both the Joint Committee explanation and the amendment to the statute enacted on November 10 described this as the average of the maximum Social Security taxable wage base for "the 35-year period ending with the year in which the employee attains the social security retirement age." However, the proposed regulation specifically calls for using a period ending one year earlier. This difference is apparently deliberate. While minor in magnitude, it creates one more uncertainty about what the eventual regulation will say and whether a court will rule that the regulation is incorrect because it fails to follow a clear provision of the statute. Far more important than the minor difference in the definition is the apparent willingness of the Secretary of the Treasury to ignore the Internal Revenue Code, hardly encouraging others to comply with it.

Meanwhile, many employers and their advisors are taking a wait-and-see approach, while others are rushing ahead in an effort to meet the deadline and attempt to pay benefits in accordance with the new requirements of the law beginning January 1. Only time will tell which approach was better in any particular situation.

Donald S. Grubbs, Jr., is President and consulting actuary with Grubbs and Company, specializing in pensions. He is a former Secretary of SOA and a former chairperson of the SOA Committee on Retirement Plans.

Centennial cont'd

June 14 panel will be composed of presidents of five actuarial organizations. They'll examine the major issues facing their organizations and look at ways to strengthen the profession.

Preliminary registration figures indicate that almost 2,000 actuaries from around the world will attend the celebration. If you would like another registration packet, please call either Sandy Kossack or Chelle Brody at 312-706-3516.

Ian M. Rolland, SOA President, is President, Lincoln National Corporation.

A perspective on the CPE requirements for U.S. pension actuaries

by Vincent Amoroso

Final regulations imposing Continuing Professional Education (CPE) requirements for enrolled actuaries in the United States were promulgated recently by the Joint Board for the Enrollment of Actuaries. The Joint Board was established by federal law (ERISA) in 1974 to regulate pension actuaries. Certain pension actuarial certifications required by ERISA must be performed by an enrolled actuary. As described below, the CPE requirements will cause some administrative inconvenience for enrolled actuaries but – with certain notable exceptions – will not affect our behavior. I view the Joint Board's action, however, as more than a nuisance. It is another instance of an outside agency supplanting pension actuaries' judgment with theirs.

In recent experience the federal government and the accounting profession have rejected actuarial judgment or replaced it with mechanical tests. For example, the pension accounting standard issued by the Financial Accounting Standards Board in 1985 specifies market-driven interest rates that change daily rather than relying on actuarial judgment. And, changes in the pension funding rules codified in 1987 rely on a prescribed interest rate standard tied to market-driven rates.

I am hopeful, however, that recent actions taken by our profession – especially the activities of the Actuarial Standards Board – will send the right message to our publics. Comprehensive professional and ethical standards that are monitored effectively should stem the erosion of the esteem in which we are held. Concerning education in the pension field, where exogenous forces are having an accelerating effect on practice, the Joint Board's requirements are less than what most of us already ask of ourselves. Some of us, therefore, think that the Joint Board's rules are an unwarranted intrusion – we do not need them. Others might view this as an opportunity: we could adopt stricter professional standards. After all, the CPE requirements for the accounting profession are considerably more onerous.

The requirements

Individuals enrolled before 1990 must renew their enrollment before March 1, 1990, and triennially thereafter. Qualifying CPE subject matter consists of core and/or noncore content. Ten 50-minute CPE "hours" completed by December 31, 1989, are required for 1990 renewals. At least six of those hours must satisfy core requirements, and the rest can be noncore. Thirty-six hours completed during a pertinent three-calendar-year period are required for triennial renewals; at least 18 of these hours must satisfy core standards.

Core content is defined in terms of subject matter that is directly related to ERISA requirements affecting practicing actuaries. Mastery of core material is necessary for the performance of enrolled actuary services. Accordingly, content that deals with pension actuarial methodology, ERISA funding standards, plan tax qualification rules, and requirements related to the termination insurance program administered by the PBGC qualifies as core material. Noncore subject matter is comprised of important background material such as pension accounting, computer programming, and finance. Credit can be earned by attending a formal meeting or teleconferencing event, such as those sponsored by the Society, or by completing a correspondence program (or audio/video taped program). Program speakers or instructors earn additional credits.

Certain schools qualify as program sponsors. Other organizations – such as employers of enrolled actuaries – can seek approval for a specific program directly from the Joint Board. Certain specified administrative requirements apply to both program sponsors and individual enrolled actuaries. Sponsors must provide certificates of completion, programs must include some means for evaluation of technical content and presentation, and records verifying these and other requirements must be maintained. Enrolled actuaries must retain information pertaining to claimed CPE credits for three years following the end of the enrollment cycle. Such information includes the program's sponsor, location, title and content description, dates attended, number of core and noncore hours claimed, names of the discussion leaders, and certificate of attendance.

Waivers from the CPE requirements will be granted in limited circumstances such as physical incapacity, military duty, and certain overseas assignments.

Sanctions

The regulation specifies an administrative review process for individuals who do not comply with the CPE requirements. If the Joint Board determines after review that an enrolled actuary has failed to satisfy the CPE requirements, consequences follow in two stages. First, the actuary is placed in a three-year period of inactive status, during which the individual is ineligible to perform enrolled actuary services. If the CPE requirements are not satisfied during this inactive period, the individual's enrollment will then terminate, and eligibility for enrollment must be reestablished. An individual who, in good faith, claims CPE credit for a program later judged by the Joint Board to be inadequate will be given time to make up those credits. Of course, the Joint Board retains the right to review program sponsors' and individual actuaries' records.

* * *

In establishing the Joint Board, Congress decided that extant professional actuarial safeguards were inadequate. In promulgating CPE requirements the Joint Board has echoed that sentiment. Actuaries in other disciplines should take note. Under the Internal Revenue Code,

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CPE cont'd

actuarial certifications are already required in connection with prefunding certain medical claims reserves. Not having a Joint Board for group actuaries is one reason that implementing regulations have not been issued yet.

CPE standards are worthwhile, especially in a volatile field like pensions. The substance of the Joint Board's rule, therefore, is not troublesome. The fact that the requirements are not being imposed from within our profession, however, is disturbing. The Society could seize the moment and consider promulgating its own CPE standards, which might ultimately be accepted for Society members by the Joint Board.

Vincent Amoroso is a Principal at KPMG Peat Marwick, specializing in employee benefits. He is Vice Chair of the SOA Pension section and served on the SOA Task Force that recommended ways to strengthen the syllabus with regard to pensions.

New AIDS papers available

Two new papers on AIDS written by David M. Holland, who was chairperson of the AIDS Task Force, have been released. Members of the Life Insurance Company Financial Reporting Section, which sponsored the printing of the papers, automatically will receive them. Others interested in obtaining copies should send $5.00 to the Society office (ATTN: Research Dept.) to cover printing and mailing charges. The papers are entitled "The HIV Epidemic and Topics for the U.S. Valuation Actuary" and "Observations on the Human Immunodeficiency Virus Epidemic and Managing Uncertainty in Insurance."

Editorial

Actuaries and national problems

by Daniel F. Case

People often describe the actuarial profession as dealing with risk. That is true, but in the case of life and health actuaries, another element may be even more important. It is the management of liabilities that accrue over time. For example, the liability associated with a group of individual-life insureds increases as the group grows older. Actuaries are skilled at mapping the accrual of that liability and arranging for income, sometimes on a levelized basis, to meet the outgo. They have an acute sense of time.

Actuaries tend to think in terms of time spans that fit the types of product they work with. Individual-life actuaries calculate prospective asset shares from issue age to the end of the mortality table. Model-office calculations may involve even longer periods. Health and pension actuaries may deal with similar time periods. Casualty actuaries, presumably, often deal with much shorter periods.

What is the appropriate time period with which to work in guiding the affairs of a country like the United States or Canada? This question gets debated actively with reference to the U.S. Social Security system. The Social Security Administration has been making 75-year projections for OASDI, presumably because the average U.S. resident lives for about 75 years. Some observers argue that OASDI should be financed on something close to a pay-as-you-go basis; others (predominating in recent years) hold that it should be financed on something like a 75-year accrual basis; and a few may feel that a period longer than 75 years should be taken into account. This last group points out that if a large surplus is first built up and then used up by the end of 75 years in accordance with current projections, at the end of the 75 years the trust fund will be heading into deficit.

Various problems that beset the United States (Canada, too, in somewhat the same degrees) are assigned various time spans. For example, estimates may call for $100 billion over 20 years to clean up and shape up the Energy Department's nuclear-weapons plants and other facilities. Bailing out insolvent savings and loan associations may be estimated to take $85 billion over 10 years. The target for balancing the federal budget may be about five years.

These time periods are arbitrary, chosen by the people who have decided to address the problems. Natural time periods underlie the real problems that we must face sooner or later. The natural time periods involve the depletion of natural resources, such as fuels, soil, and fresh water; the rising levels of pollution; the rate of population increase; the greenhouse effect, and so forth. We do not know enough to project these trends reliably, but we know they point in dangerous directions.

Elected government officials (in the United States) are sometimes said to think in time frames of two, four, or six years. Many corporate executives think largely in terms of immediate "bottom-line" returns. Economists and accountants may use somewhat longer periods, such as the useful lives of specific assets. Some actuaries use periods longer than those. Ecologists take into account even longer periods, such as the lifetimes of whole classes of assets – fuels, soil, wildlife species, etc.

Do actuaries, with their acute sense of time and their expertise in managing the accrual of liabilities, have a special contribution to make to the debates of national problems? Granted, most actuaries are not economists, sociologists, defense experts, or even health-care experts. No single discipline, however, embraces the scope of all a nation's problems.

One does not have to be directly involved in government or politics to help find solutions. If you think you have a potentially useful observation or idea, why not write to your federal government representatives and your newspaper? Of course, active involvement in some way is even better, if you can manage your time so as to include it!

Actuarial appraisal or ???

by Robert D. Shapiro

Over the past decade, a small group of actuaries have become deeply involved and more visible in insurance company mergers and acquisitions (M&A).

This increased public exposure has encouraged consulting firms in the M&A arena to reexamine their practice standards and quality control procedures. Today's M&A actuarial practitioners, being close to the M&A markets and to related users of actuarial work, are best positioned to evaluate M&A actuarial analyses for the profession.

Since the mid-1970s, actuarial appraisals and/or other actuarial analyses have been prepared as a part of many, if not most, significant insurance company sales. Sellers and potential buyers have used the actuarial reports to help determine company value. Many believe that actuarial appraisal techniques provide the most meaningful value information when considered alongside of "multiples" (of book value or earnings) and current stock prices. Unless actuarial values are determined appropriately, the M&A marketplace will suffer, and the actuary's role in the M&A process could be diminished.

Issues are being addressed at four different levels:

- Professional issues relating to the way in which actuaries and actuarial reports are perceived by others in the M&A arena,
- Report structure issues, including the desired level of documentation and the appropriate form of the communication,
- Technical issues primarily reflecting how to analyze changes in the environment and the way insurers do business, and
- Quality control issues relating to each of the three previously described categories.

Professional issues

The actuarial profession is hard at work defining the appropriate future role of the actuary. A critical facet of this process is underpinning the profession with the appropriate balance of science and business. Unlike other professions, ours has been closely associated with specific industries, i.e., the insurance and employee benefits "businesses."

The role of actuaries in M&A analysis should mirror the profession's long-term vision and reflect the way in which we want the public to view what we do.

Certainly our insurance expertise should create key roles for actuaries in insurance company M&A situations. How far should this role extend beyond technical analysis to strategic, marketing and organizational issues? Will other financial institutions or even nonfinancial businesses be in the domain of the actuary of the future?

Report structure issues

Many of our M&A-related actuarial report formats have been extrapolated from historic M&A-related work. This process is inadequate for the rapidly changing insurance and M&A environments. Many M&A actuaries are hard at work reconceptualizing M&A actuarial report formats.

In the future, we can expect significant changes in the M&A actuary's role. Actuarial reports must reflect these changes. Consider, for example, an actuarial report containing financial projections and present values of future projected earnings for an insurance company. Such a report should probably be labeled "actuarial appraisal" only if the actuary takes full responsibility for the assumptions and produces a defined range of value. Otherwise, the actuarial report would be more properly labeled "actuarial analysis."

Technical issues

Seven critical assumptions typically underpin the actuary's analysis:

1. Claim costs (mortality or morbidity)
2. Persistency
3. Expenses
4. Net investment earnings rate
5. Federal income taxes
6. Future production expectations
7. Discount rates

In reviewing actuarial analyses developed in the late 1970s and early 1980s, we find that items 1, 2, 3 and 4 generally were established after reviewing the company's experience and pricing assumptions. Pretax projections and present values were historically presented with explanations such as (a) taxes would depend on the character of the final transaction and (b) if a 334(B)(2) tax election were made, taxes would not be paid for a number of years. Future production expectations were taken from company plans. Discount rate ranges generally centered somewhere around 15%.

Our insurance operating environments have dramatically changed in recent years. M&A analyses have been changing to reflect the emerging new environments. For example, consider the following new dimensions in each of the seven critical assumptions listed previously.

1. Claim costs: Impact of AIDS? Impact of special underwriting approaches and guarantees? Impact of potential government programs?

2. Persistency: Approach to evaluating universal types of contracts? Impact of increased use of independent distributors? Impact of interest rates and surrender charges?

3. Expenses: Implications of widespread expense excesses that exist because of competitive factors and/or operating inefficiencies?

4. Net investment earnings rate: Assessing the asset side of the balance sheet? Reflecting variability and risks of interest sensitivity? Employing stochastic analyses?

5. Federal income taxes: Complexities of today's tax environment? Loss of 334(B)(2)? Propriety of displaying only before-tax values?

6. Future production expectations: Appropriate production levels and types of products? Appropriate future profit margins (e.g., consider expense excesses, spread deficiencies, investment risks, etc.).

7. Discount rates: Variability of risk by line of business and management philosophy? Relationship to factors such as required surplus, MSVR requirements, federal income tax premise and future production expectations?

M&A actuarial analyses must evolve to reflect the more complex environment. Increasingly, actuaries are

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Appraisal cont'd

changing how they structure and document their analyses. For example, year-by-year projection information now often supplements present value calculations. Also, more and more sensitivity testing is found in M&A-related actuarial reports.

Quality control issues

Quality control ultimately is the responsibility of individual actuaries and their companies. To the extent that the actuarial profession establishes clear principles and general standards for practitioners, the quality control process is enhanced.

However, each actuarial practitioner and actuarial firm has a unique way of doing things that cannot be ignored in evaluating the quality control process. For example, some firms have detailed rules on process that are imposed on all appraisal reports, while other firms operate with more general guidelines. Neither approach is inappropriate. What is important is that the professional and structural issues be addressed first to assure that the right job is done before checking that the calculations are right.

The public expects the actuary involved in the M&A arena to provide expert, objective analysis. On the other hand, the M&A arena places many pressures on actuaries and professionals to shape their work in "special ways" because of the commercial aspects of transactions. Two critical questions are:

1. What should be the actuary's role (and responsibilities) in M&A work?
2. What principles and standards for analysis and reporting follow this definition of the actuary's role?

These questions mirror closely related issues facing the actuarial profession. How do/should we weigh scientific and business aspects when we define the foundation for our profession and the resulting standards for our work? In the M&A environment, is our role to be (a) an independent, objective quantifier or (b) an insurance company appraiser?

The continuing effort by actuaries in the M&A field to resolve these issues will help draw from and contribute to the profession's effort to set our future path.

Robert B. Shapiro is President, The Shapiro Network, Inc.

Grandfather ungrandfathered

by David S. Lee

The (U.S.) Technical and Miscellaneous Revenue Act of 1988 has created a very significant administrative problem for companies having a large block of "grandfathered" universal life business. The problem is that seemingly harmless future changes in benefits are categorized as "material changes," causing a policy to lose its grandfather status and subjecting it to the "modified endowment" rules. Consider the following example:

On January 1, 1986, John Doe purchased a $100,000 universal life policy from XYZ Company. John is 45, married, with one daughter. His planned annual premium of $2,000 is well below the guideline level premium limitations. The policy is grandfathered under the 1988 Act, because it was issued prior to June 21, 1988.

On January 1, 1991, John adds a family term rider to his policy. Since it is now after June 21, 1988, and the rider is considered a qualified additional benefit, the addition of the rider constitutes a "material change," and the policy loses its grandfather status and falls under the modified endowment rules. The 7-pay limit, adjusted to include the cash value of $10,106, is calculated to be $4,716 per year. This adjusted 7-pay limit is well in excess of John's planned premium, so the policy is not close to being a modified endowment. Therefore, the company implements the rider addition without discussing the "grandfathering" and "ungrandfathering" status with John.

On January 1, 1993, John reduces his $100,000 universal life policy to $50,000. The tax law then requires a recalculation of the 7-pay limits. The formula requires going back to the date of the "material change," January 1, 1991, assuming the death benefit from that time forward is the current death benefit of $50,000 and recalculating the 7-pay premium limitation as of that date. The new 7-pay premium limitation is $1,535 per year, which is below the premium John has been paying. Therefore, the reduction in death benefit has caused the policy to become a modified endowment.

In 1993, John's daughter begins college. On January 1, 1994, John makes a partial withdrawal of $2,000 to help defray tuition costs.

John is taxed "interest first" on his partial withdrawal and also must pay a 10% penalty tax. Had John not added the family term rider in 1991, the same $2,000 withdrawal would not have resulted in a taxable event because it would have been taxed "basis first."

John is infuriated when he learns that he is taxed "interest first" and has to pay a penalty tax. He has only $1,300 remaining after tax to pay the bills. "Nobody ever explained any of this tax stuff to me," John exclaims. John is even more infuriated when he learns that had he not added the family term rider, he could have made the same $2,000 withdrawal, and it would not have resulted in a taxable event because it would have been taxed "basis first." "Why didn't someone tell me of these potential tax consequences when I first added the rider?" he asks.

The end result of this example:

(1) John surrenders his policy.

(2) John tells all his friends and acquaintances that XYZ is a terrible company and that anyone who buys insurance from them is crazy.

(3) John sues XYZ Company and collects a tidy sum.

(4) The policyowner service rep handling this case has a nervous breakdown from the accumulated stress of this case and the 999 similar cases he handles.

The problem illustrated by this example is that companies need to notify policyholders of the potential tax consequences when they make "material changes" to grandfathered policies, even if those changes don't result in the policies' immediately becoming modified endowments. Since attorneys, actuaries, and other insurance professionals are having difficulty understanding and interpreting this complex law, the type of communication required to allow grandfathered policyholders to understand their situations will be difficult or impossible to design. The price of administering inforce universal life

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Grandfather cont'd

business just went up, and it may be more than companies can afford.

David S. Lee is Vice President and Actuary, United of Omaha Life Insurance Company. An Assistant Editor of *The Actuary,* he is a past member of the ACLI's Task Force on Section 7702, Definition of Life Insurance.

Managing investment risk and returns

The Investment Section will sponsor a seminar on "Managing Investment Risk and Returns" April 17-18 at the Marriott Marquis in New York City.

The seminar will focus on practical techniques for managing investment risk and enhancing returns for a broad array of both interest-sensitive and portfolio products. The agenda is:

Monday afternoon (April 17) – three modules: "Mortgage-Backed Securities and Other Asset-Backed Securities;" "Futures and Options;" "Equities and Equity-Linked Vehicles"

Tuesday morning (April 18) – two focus sessions: "Controlling Interest Rate Risk" and "Return Enhancement"

Tuesday afternoon – case studies on "SPDA and Universal Life;" "Participating Insurance;" "Immediate Annuities and Structured Settlements"

The seminar faculty is a distinguished group of investment actuaries, consultants, investment bankers, and investment executives with hands-on experience in managing risk to enhance returns. Luncheon speaker Irwin Vanderhoof will talk on "Pilgrim's Progress: A Perspective on Managing Risk and Returns."

Time will be provided for questions and answers at the end of each session and at a final Open Forum where faculty members will take questions from the audience.

Early registration material was mailed out in mid-January. Registration fees are as low as $200 (U.S. funds) for Investment Section members who register early. Questions may be directed to Ken Stewart at 212-747-7006, or to Pete Bondy, Greg Carney, or Howard Kayton at their *Yearbook* addresses.

FACTUARIES

In the spirit of "turnabout is fair play," this month's "Factuaries" profiles the feature's perpetrator.

Name: Deborah Poppel

Birthday: January 17, 1955

Birthplace: Brooklyn, New York

Current hometown: Concord, Massachusetts

Current employer: John Hancock

Children: Maxwell, 5

My first job was: as a counselor at Deerkill Day Camp.

I'd give anything to have: a flat stomach.

The number of exams I flunked: 1 or 3 depending on when you start counting.

The books I recommend most often: *The Princess Bride, The Phantom Tollbooth.*

The last movie I saw: *Punchline.*

Nobody would believe it if they saw me: cleaning.

If I could change one thing about myself, I'd: be nicer.

When I'm feeling sorry for myself: I read trashy books.

My fantasy is: to have the elevator at Hancock open and 50 people be singing, "Well, it's been a long day," as in "How to Succeed in Business Without Really Trying." (That's my clean fantasy.)

The silliest thing I've ever done: is to put a picture of a dog over my picture on my company ID. It worked for a week. (It was a particularly attractive dog.)

If I could do it over I'd have: taken more advantage of my college years.

My proudest actuarial moment was: creating and publishing "The Actuarian" in the November 1985 *Actuary.*

The best time of my life is: spent performing.

Book Review

George H. Andrews and John A. Beekman, *Actuarial Projections for the Old-Age, Survivors, and Disability Insurance Program of Social Security in the United States of America,* pp. 193, Actuarial Education and Research Fund, Itasca, IL 60143, 1987.

Summary of review by Robert J. Myers

This monograph provides an independent overview of the assumptions and methodology behind the OASDI estimates made by the Social Security Administration. Such information has heretofore been available only in the annual reports of the Board of Trustees of the OASDI Trust Funds, in the Actuarial Studies issued by the SSA, and in writings by individuals closely associated with the system.

The contents of the seven chapters are:

Chapter 1	provisions of OASDI (more detail in an appendix)
Chapter 2	demographic assumptions and population projection
Chapter 3	economic assumptions behind the actuarial estimates
Chapter 4	the methodology involved using the assumptions in the second and third chapters to make the long-range projections of numbers of covered workers, insured persons, retired workers, taxable payroll, and GNP
Chapter 5	the special features of the short-range (5-year) estimates
Chapter 6	the special features of the long-range (75-year) estimates
Chapter 7	overview of the short and long-range estimates, why they are needed, with descriptions of several measures of actuarial soundness
Addendum	possible future similar studies (e.g., the Medicare program)

The monograph endorses the work of the SSA staff over the years for making available a "wealth of excellent material." The authors have performed a great service to interested parties by condensing the great amount of information involved into a very usable study. The review ends with this recommendation: "The monograph is truly excellent and should be made 'required reading' for any actuary or nonactuary who is interested in the OASDI system."

This book is available for loan from the Society of Actuaries library.

Robert J. Myers, Professor Emeritus at Temple University, is a Past President of the Society of Actuaries, former Chief Actuary of the Social Security Administration, and author of numerous papers and a book on the U.S. Social Security system.

Overview of new book

Daniel F. McGinn, *Corporate Retirement Plans: An Actuarial Perspective,* pp. 179 and 5 Appendices, International Foundation of Employee Benefit Plans, Brookfield, WI 53008-0069, 1988

(Ed. note: The following is a brief overview of the above-named book. A formal review of the book will appear in the TSA.*)*

A main assertion of the book is that Congressional action is needed to halt the decline in the number of defined benefit retirement plans and the number of American workers covered by them. Unless some relief is granted for sponsoring corporations of well-funded plans, Congress will be forced to impose progressively higher Social Security taxes to support higher Social Security benefits needed to replace the benefits lost by the destruction of the private retirement system.

The book begins with a review of the roles played by the federal government and the advisors required in the design, administration, and fund investment of retirement plans. The features of each major type of plan are analyzed and evaluated from the perspective of the retirement security provided plan participants.

Next considered is the impact on plans of federal laws and regulations adopted by federal agencies since ERISA. The author maintains that growth of defined benefit plans has been stifled by burgeoning termination insurance premiums and complicated benefit and contribution limitations. Another factor in their decline is the employer perception that the corporation is exposed to great financial risk (with little employer control over costs) once a plan is adopted. Coincidentally, defined contribution plans have grown due to their relatively greater simplicity and attractiveness to young employees.

The author describes the beneficial changes to all plans resulting from the federally mandated protection of a vested employee's spouse upon the employee's premature death. He also discusses the confusing rules that apply when a company sponsors more than one type of plan.

As the title suggests, much of the book deals with the great array of plan design, actuarial funding, and asset projection issues of defined benefit plans that must be addressed by a corporate sponsor. Included is the new approach to corporate pension accounting adopted by the FASB.

Finally, the author addresses the corporate strategies used to terminate defined benefit plans and benefits from asset reversions. Recent tax reform measures and legislation enacted as a result of reactions to the Department of Labor and the PBGC are further disincentives to establishing or maintaining defined benefit plans.

Library offers online searching

The SOA Library now offers a new service – computerized database searching through the online vendor DIALOG, which was chosen because it offers more databases than any other vendor.

Of the 320 databases available through DIALOG, approximately 80-85% are machine readable files of print indexes.

Some examples of databases available are PTS U.S. TIME SERIES (online equivalent of BASEBOOK, a compilation of production, price and usage statistics illustrating industry trends) and MOODY'S CORPORATE NEWS (online equivalent of five "NEWS REPORTS" including MOODY'S BANK AND FINANCE). The other databases provide information not available in print format. An example of this type of database is PR NEWSWIRE, which contains the complete text of news releases prepared by companies, public relations agencies, trade associations and government agencies.

Some very large databases cover broad fields. An example is SOCIAL SCISEARCH, an international and multidisciplinary file of the social, behavioral and related sciences containing over 1.8 million records from 1971 to the present. A database that is narrow in scope is M & A FILINGS. This file contains detailed abstracts of every original and amended merger and acquisition document released by the Securities and Exchange Commission since 1985.

Business and finance appear to be the most popular areas for the development of new databases. More than 95 databases included in the DIALOG family are classified in these areas. Database charges vary from $30 to $150 per hour and are only a part of the overall cost of a search. Telecommunications, database royalties and print charges essentially make up the other items in the cost of a search. At this time, the Society is charging a flat fee of $15 for an online search. As we gain experience with this service, we will adjust the costs accordingly.

If you have questions about online searching, contact Donna Richardson, Research Librarian, at the Society office.

Dear Editor:

Editorial out of line

I have read with great interest the letter signed by 346 Society members, regarding granting of examination credit on the basis of successful completion of certain college courses, and the reply by Mr. McGuinness (November *Actuary*). While I basically agree with most of the points raised by the 346 concerned members, the purpose of this letter is not to prolong that particular argument.

However, the editorial entitled "The 'blacksmith mentality' " by Mr. M. David R. Brown, seems quite out of line. Mr. Brown makes a serious error in chiding the authors for not addressing the faults or merits of this proposal in their communication. I'm sure these were addressed by most, if not all, of the authors in their responses to the original White Paper. To state these arguments in the letter in question would have been repetitious (and silly).

In any event, if concerned members cannot address a question of legitimate concern to the Board of Governors without risking the kind of attack indulged in by Mr. Brown, our Society has reached a very low ebb.

Walter P. Henry

Protests 'personal attacks'

As one of the 346 members who signed the letter to the Board opposing college credit, I believe Mr. Brown's editorial shed heat, but no light. His unsupported remarks that we who signed believe the world owes us a living and that no valid criticism of the Board's decision exists are simply untrue.

Valid concerns exist on how to draw the best and brightest to the actuarial profession, but changing the qualification process to allow college credit is not necessarily the answer. In my view, the key is better education of the public on the actuarial profession and the challenges and rewards it offers. How can we attract good people if they don't know of or understand the profession?

The challenge within the Society of how to deal best with these issues is difficult. A personal attack on individuals who hold an opposing view does not contribute in any way to the discussion and ultimate resolution of these issues. I hope that in the future Mr. Brown and *The Actuary* will voice their opinions in a more positive and meaningful fashion.

Martin P. Klein

Respect craftsmen

I am retired, tired, and sometimes ired – such as by that put-down of blacksmiths in the November issue of *The Actuary*. Blacksmiths are craftsmen, as my father was. Many actuaries should learn to look up, not down, at craftsmen.

Ralph E. Edwards

For college credit

I am writing this letter with respect to "The College Credit Controversy" as reported in the November 1988 edition of *The Actuary*.

My personal background may be briefly summarized as follows:

(1) Devoted over a decade to Society Education and Examination activities.

(2) Past president of the Society.

(3) Since the mid-1960s my activities have been primarily in insurance company management.

At the outset, I wish to say that I fully support the Board of Governors' decision to "authorize an experimental program of Level 2 CCC."

To my knowledge the question of college course credit for certain of the early Society examinations has been considered at various times for at least 30 years. Even today I can recite the arguments (both logical and emotional) that I have heard advanced on this subject. I am well aware that there are a vast number of colleges and universities spread across the two nations in which we FSAs reside and work. Obviously, the academic standards of these institutions will and do vary somewhat. The acid test, in my mind, rests with the students demonstrating proficiency in passing the later Associateship examinations.

Again, I fully support the Board's decision on this matter. I express the urgent hope that the experiment will be successful and the Society will

Continued on page 10 column 1

Dear Editor cont'd

move on to a full implementation of this overdue step.

Edwin B. Lancaster

Another signature

Having studied both sides of the college credit controversy (November 1988), I would like to be regarded as the 347th signatory of the letter Mr. Evans has submitted.

Gregory W. Chicares

Another alternative to taking exams

The October 1988 *Actuary* printed Bill Bolton's and David Hippen's letter concerning the conflict in dates between Society meetings and actuarial exams.

Those of us who have worked on committees recognize any date one picks will conflict with some other meeting. It is impossible to avoid the conflict of dates!

This means we must look elsewhere for a solution to their dilemma.

Can we discontinue Society meetings? Technically, yes; but practically speaking, my tendency is to believe we should maintain them.

Therefore we turn to the examinations themselves. What can we do? A simple answer comes to mind (or is it simple mind comes to answer?):

The Society will grant a passing grade to any student who has the foresight to sign up, at least four months in advance, for an exam whose date conflicts with a Society meeting.

If such a broad stroke seems too generous to some of you, then perhaps we can begin this experiment by granting the passing grade only to those who attend that Society meeting.

Think of the good which comes from such an approach:

- The Program Committee will have a larger pool of persons to draw upon for participation and audience at a meeting.
- Bill and Dave will have fewer exam supervisors to recruit (assuming attending a meeting is more desirable than writing the exam).
- It provides an alternate, alternate approach.
- It tests the students' projection and planning abilities, which will be needed in their managerial and consulting futures.
- It enhances the claim of those who believe meeting attendance is an excellent measure of an individual's continuing education.

Some may feel such an arrangement is too liberal (the "l" word). For them, consider the following:

- Put one asterisk, for each exam so passed, next to the member's name in the *Yearbook*.
- Require at least one "sat and passed" subsequent exam before bestowing the Associate or Fellow designation on that individual.

We are soliciting members for a committee to draft an initiative reflecting the ideas expressed above. Such an initiative will be placed before the Society's membership for discussion and action. Of course, we welcome any comments your readers may have.

Lawrence Mitchell

Heeere's Janie!

I found it odd that there was no mention of Steve Radcliffe's lovely wife (of 19 years!), Janie, in November's "Factuaries" column.

Steve's Lovely Wife, Janie

(Ed. Note: We have pointed out to our Features Editor the absence of spousal mention from the November and February "Factuaries" columns.)

An 'honest' actuary?

What a breath of fresh air! It has been clear to me that Social Security is 99% a political problem and, maybe, 1% an actuarial problem. Yung-Ping Chen, gently, makes this clear in his articles (October 1988 *Actuary*) analyzing the Myers-Robertson positions on this subject. He cuts through reams of rhetoric when he says, "Fundamentally there are only two sides to the Social Security equation: taxes and benefits." That means that Social Security is viable whenever the people want it enough to overcome their hatred of taxes and/or deficits. This was well illustrated in 1983. Hundreds of gloom-and-doom articles by Robertson and others pushed for benefit cuts because Social Security was "going bankrupt." Congress could not sell that to the voters. The results were substantial tax increases for low-income Americans and trivial benefit reductions.

I especially liked Chen's treatment of the nonsense actuarial 75-year estimates that long have been the basis for political advocacy of immediate Social Security benefit cuts and possible transfer to the private sector. Myers has not been nearly as gloom-and-doom in these areas as Robertson. Still, in all honesty, I must say that Myers was still defending the 75-year estimates as meaningful in our last correspondence on the subject.

The 75-year "actuarial" estimate is not meaningful for the same reasons that the Club of Rome shorter-term estimates were not meaningful. You cannot make accurate estimates even for 10 years by using four or five projection variables in a million-variable environment. For example, up until now actuaries have made these estimates without including any estimates of deaths from AIDS! What other horrors and improvements will be discovered in the next 50 or 75 years? What political changes? Seventy-five years ago there wasn't any Social Security program. You might say that the actuaries have been smarter or dumber, however you see it, than the Club of Rome. They did not make their flawed estimates short enough that their inevitable failure could be thrown in their faces. Chen says it much better than I: "We simply do not know the future, and each generation must look at its problems in its own way." I wish that I had said that.

I dislike postscripts, but I must admit to having gone from euphoria to a gloom-and-doom feeling of my own as I finished Chen's article. I thought that I had finally discovered a "right-thinking" actuary in my favorite area. But I am still alone. I see that Yung-Ping Chen is not an actuary. It's easier to find an honest politician.

Charles M. Larson

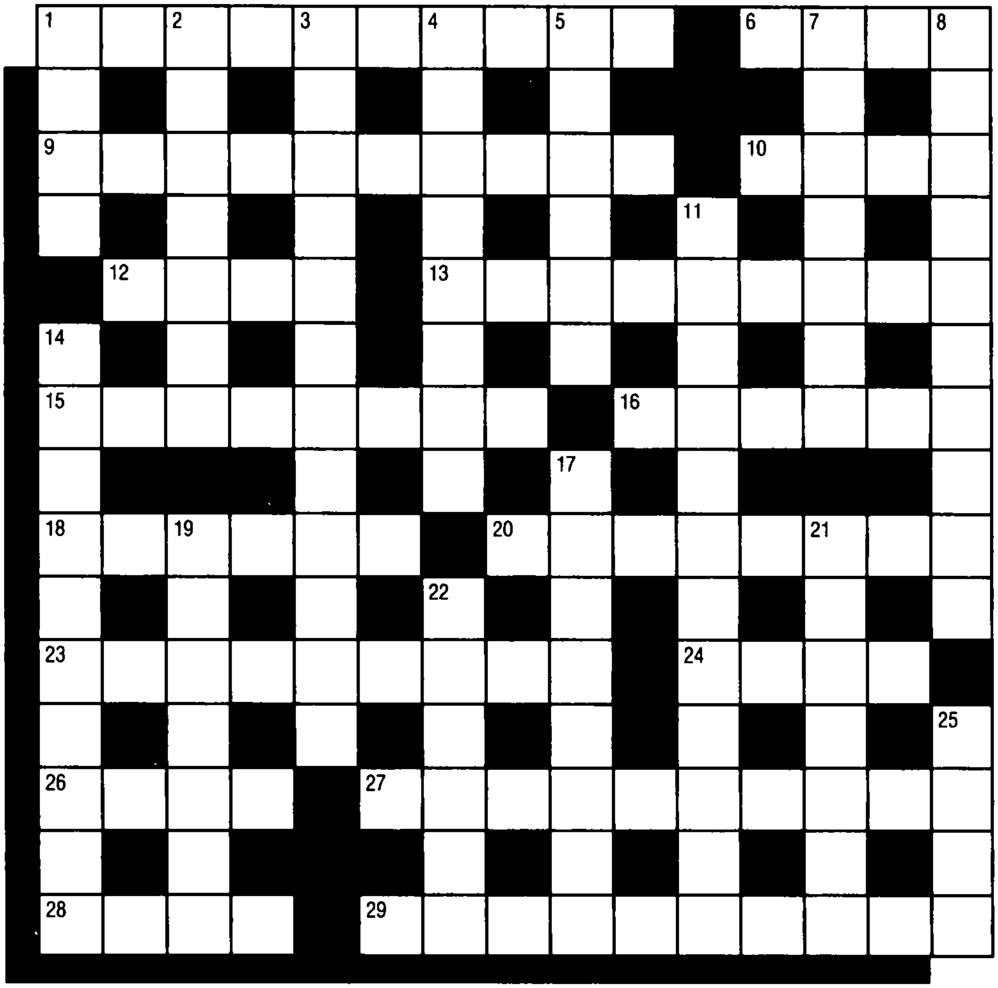
ACTUCROSSWORD

Across

1. Lord warmed in place of illusions (5,5)
6. Image in out of company (4)
9. If tail seat repositioned disasters ensue (10)
10. Musical play without fuss on a warship (4)
12. A letter from a Florida place: her little hand was frozen (4)
13. Variety of eglantine, but tasteless (9)
15. Drink disarmed Arabs in them (8)
16. A meal outside a send off (6)
18. Graduate very strongly in the island (6)
20. Miserable attempt to etch - and drew badly about it (8)
23. Highly regarded: even sceptered in a fashion (9)
24. Capital advance desired by Antony (4)
26. Extinct animal of Chaldees and North America (4)
27. Paving material good for Hell (10)
28. "One woe doth tread upon another's ..." (Hamlet) (4)
29. Whereby ground can be put right, if sterile (10)

Down

1. Skillful quality of the French feet (4)
2. Making records of passages (7)
3. In the chips: factories around places of St. Columba and St. Patrick (12)
4. Manifestly not in the wrong (8)
5. Music sounds to the fore (6)
7. Screen A Car Unit (7)
8. Screen after dark, deadly belladonna (10)
11. Go crazy in office conditions (12)
14. Its orginator offered 1000 to 1 against this card distribution (10)
17. President about to die on slope (8)
19. Fresh start is sure to find an opening (7)
21. Fears about gold coming and going in the small hours (7)
22. Ascent to change position (6)
25. King of arts (4)



100% SOLVERS — ***November:*** L Abel, J & L Abraham, R Alexander, S Alpert, D Baillie, D Baldwin, F Bernardi, T Boehmer, J Braue, A Brosseau, J Brown, M & D Brown, J Brownlee, L Campbell, R Carson, S Colpitts, S Cuba, S Dobronyi, M Eckman, K Elder, B Fortier (and Oct), C Friedrich, P Godfrey, P Gollance, O Gupta, R Hamamo, S & E Harder, W Hill, R Hohertz, A P Johnson, O Karsten, D Kendall, S Keyş, K Kildahl, M Kirr & S McCuaig, R & J Koch, D Leapman, H Leff, M Lykins & C Mutti, W Lumsden, P Marks, R C Martin, G Mazaitis, G D McDonald, J Mereu, H Migotti, R A Miller, Anonymous (C Montpetit?), M Mortensen, B Mowrey, B Packer, R Picard & R Maguire, F Rathgeber, B Rickards, L A Safeco, J Schwartz, N Shapiro, G Sherritt, C G Smith, M Steinhart, Mrs J S Thompson, D Thoms, M Vandesteeg, C Walker, D Weill, A Whiton, and D S Williams.

January's Solution

Send solutions to: Competition Editor, 8620 N. Port Washington Rd (312), Milwaukee, WI 53217

ACTUCROSTIC

A. New England, to NFL fans. — 71 28 148 11 45 237 91 114

B. A in x = acos A & y = bsin A. (2 wds) — 6 94 242 129 223 42 178 120 209 / 147 154 29 194 70

C. Identical twins, eg. (2 wds) — 195 104 234 47 208 172 88 243 182 156

D. Top of a sailing vessel or newspaper; verifiable by Thomas, the admitted doubter. — 17 108 191 84 157 40 123 224

E. Funds in the custody of a third party. — 12 130 35 106 215 67

F. Hot rod drivers like to leave this on pavement. — 7 199 110 238 57 124

G. The only proper time for divorce. (2 wds) — 5 93 165 231 151 74 / 168 49 134 216 183 63 201 117 33

H. He was chief for two weeks and tried hard. — 226 65 142 97 27 192

I. A slight failing; a fault. — 59 186 153 113 39 232 206 20

J. Underwriting result desired by all agents. (2 wds) — 15 152 43 132 204 102 24 95 68 219 / 227 83 187 116

K. Common expression of gratitude. — 13 62 164 101 140 233

L. Space figure not lying in a plane. (2 wds) — 1 176 85 135 61 163 44 / 118 105 225 22 210

M. Form of military transport popular in World War I. (2 wds) — 66 133 10 111 230 211 82 34 149 89

N. What to do with jumper cables on cars. (4 wds) — 14 138 54 159 3 162 119 229 / 99 184 76 203 37

O. y = 3x + 5 and those in B, eg. — 175 143 222 115 127 36 198 86 16

P. Longing for the place you wouldn't move back to. — 4 141 78 109 158 53 200 241 32

Q. Supported a cause or doctrine — 23 213 80 169 144 161 51 155

R. Abscissa. (hyph) — 41 31 64 121 75 240 96 / 197 18 214 188

S. Asphalt shingles, eg. (3 wds). — 174 26 207 103 145 92 69 2 79 202

T. Temporary substitute; stop gap — 77 55 179 173 190 128 21 107 146

U. Appraise; evaluate. — 126 8 90 217 52 180

V. Top person in the kitchen. — 9 185 166 235

W. One who doesn't care to go out. — 221 139 170 205 137 177 58 239

X. Waiting in a hurry. — 60 236 171 131 25 189 81 122 48 220

Y. A barrier that squeaks when it swings. (2 wds) — 98 150 193 167 38 56 112 218 72

Z. Penny wise and pound foolish. — 30 136 19 125 228 73 50 160 / 196 100 46 181 87 212

1 L	2 S		3 N	4 P	5 G	6 B	7 F	8 U	9 V	10 M	11 A	12 E		13 K	14 N	15 J	16 O		17 D	18 R	19 Z	20 I	21 T
22 L	23 Q		24 J	25 X	26 S	27 H	28 A	29 B	30 Z		31 R	32 P	33 G	34 M	35 E	36 O	37 N	38 Y		39 I	40 D	41 R	42 B
43 J		44 L	45 A	46 Z	47 C		48 X	49 G	50 Z	51 Q	52 U		53 P	54 N	55 T	56 Y	57 F	58 W		59 I	60 X	61 L	62 K
	63 G	64 R	65 H	66 M	67 E	68 J	69 S	70 B		71 A	72 Y	73 Z	74 G	75 R	76 N	77 T	78 P		79 S	80 Q	81 X	82 M	83 J
84 D	85 L	86 O	87 Z		88 C	89 M	90 U	91 A	92 S	93 G	94 B	95 J	96 R	97 H	98 Y	99 N		100 Z	101 K	102 J		103 S	104 C
105 L	106 E		107 T	108 D	109 P		110 F	111 M	112 Y	113 I	114 A		115 O		116 J	117 G	118 L	119 N	120 B	121 R	122 X	123 D	124 F
125 Z		126 U		127 O	128 T	129 B	130 E	131 X	132 J	133 M	134 G	135 L		136 Z		137 W	138 N	139 W	140 K		141 P	142 H	
143 O	144 Q	145 S	146 T	147 B	148 A	149 M	150 Y	151 G	152 J		153 I	154 B	155 O		156 C	157 D	158 P	159 N	160 Z	161 Q	162 N	163 L	164 K
165 G	166 V	167 Y		168 G	169 Q	170 W	171 X	172 C	173 T	174 S	175 O		176 L	177 W	178 B	179 T	180 U		181 Z	182 C	183 G		184 N
185 V	186 I	187 J	188 R		189 X	190 T		191 D	192 H	193 Y	194 B	195 C		196 Z	197 R	198 O	199 F	200 P	201 G		202 S	203 N	204 J
205 W		206 I	207 S	208 C	209 B	210 L		211 M	212 Z		213 Q	214 R	215 E	216 G	217 U		218 Y	219 J	220 X		221 W	222 O	223 B
224 D	225 L	226 H	227 J		228 Z	229 N	230 M	231 G	232 I	233 K		234 C	235 V		236 X	237 A	238 F	239 W		240 R	241 P	242 B	243 C

LAST MONTH'S SOLUTION: T Galvin, Snead Stories Up to Par, "I'd like to have a dollar for every time I told one of my opponents that I thought his hands were in beautiful position at the top of his swing. Soon he's thinking about that and starts hitting the ball all over creation. Snead is a winner, always has been and always will be. He hates to lose." The Milwaukee Journal, 8-21-88.