PENSION SECTION NEWS

NUMBER 45 FEBRUARY 2001

From the Pension Section Council Chairperson

by Bruce Cadenhead

This is my first column as Chair of the Pension Section Council, so of course I looked at past issues of Pension Section News to see how previous Chairs have handled this golden opportunity. Two related themes that have recurred involve communications with our members:

- Ensuring that the Council is responsive to the needs of Section members
- Keeping members informed of our current projects

Since we have some new developments in both areas, I think I'll focus on these topics in this column.

First, however, I would like to thank the outgoing members of the Council

(continued on page 3)

Lump Sums and Benefit Adequacy

by Anna M. Rappaport

There is a wide disparity in the use of lump sums as a form of pension benefit payment. Lump sums are used nearly all of the time for defined contribution plans and cash balance plans in the United States, and they are the usual method of payment in Australia. In the United Kingdom, most of the retirement benefit, about 75%, must be paid as a life annuity. They are offered more often by defined benefit plan sponsors than in the past in the United States, and when offered, the offer is usually accepted. In the United Kingdom, there are efforts underway to get the requirements liberalized.

Are lump sums a good thing? It depends on your point of view. They are great for some people, and a disaster for others. The benefits of lump sums are that they:

- Allow individuals control over assets and flexibility in planning for personal retirement
- In times of good investment performance, allow those who invest well to make their funds grow more rapidly
- Allow individuals to leave any funds not used for retirement to their heirs, but depending on who the heir is, a surviving spouse could be left without resources
- Allow individuals with considerable retirement assets to use some of the money to support frailty, to buy a retirement home, etc.

But, this is a story with down sides as well. Some of the down sides include:

- Money can be spent for non-retirement purposes, and research, in fact, shows that many people do spend all or part of their lump sums for non-retirement purposes

(continued on page 4)

In This Issue

PENSION SECTION NEWS
Issue Number 45, February 2001

Published quarterly by the Pension Section
of the Society of Actuaries
475 N. Martingale Road, Suite 800
Schaumburg, IL 60173
Phone: 847-706-3500
Fax: 847-706-3599
World Wide Web: *http://www.soa.org*

This newsletter is free to Section members.
A subscription is $15.00 for nonmembers.
Current-year issues are available from the
Communications Department and are on the
SOA Web site (*www.soa.org*).
Back issues of Section newsletters have been
placed in the Society library.
Photocopies of back issues may be requested
for a nominal fee.

Articles Needed for the *News*

Your help and participation are needed and welcomed. All articles will include a byline to give you full credit for your effort. *News* is pleased to publish articles in a second language if a translation is provided by the author. For those of you interested in working on the *News*, several associate editors are needed to handle various specialty areas such as meetings, seminars, symposia, continuing education meetings, teleconferences, and cassettes (audio and video) for Enrolled Actuaries, new pension study notes, new research and studies by Society committees, and so on. If you would like to submit an article or be an associate editor, please call Dan Arnold, editor, at (860) 521-8400.

As in the past, full papers will be published in *The Pension Forum* format, but now only on an ad hoc basis.

***News* is published quarterly as follows:**

Publication Date	Submission Deadline
February	January 10
June	May 10
September	August 10
December	November 10

Preferred Format

In order to efficiently handle articles, please use the following format when submitting articles.

Mail both a diskette and a hard copy of your article. We are able to convert most PC-compatible software packages. Headlines are typed upper and lower case. Carriage returns are put in only at the end of paragraphs. The right-hand margin is not justified.

If this is not clear or you must submit in another manner, please call Joe Adduci, 847-706-3548, at the Society of Actuaries for help.

Please send original hard copy of article and diskette to:

Joe Adduci
Society of Actuaries
475 N. Martingale Road
Suite # 800
Schaumburg, IL 60173-2226
e-mail: *jadduci@soa.org*

Please send a copy of article (hard copy only) to:

Daniel M. Arnold, FSA
Hooker & Holcombe, Inc.
65 LaSalle Road
West Hartford, CT 06107
Phone: 860-521-8400; Fax: 860-521-3742
E-mail: *darnold@hhconsultants.com*

Thank you for your help.

Chairperson's Column
continued from page 1

Bruce Cadenhead

who completed their three-year terms this past fall: Colin England, Lindsay Malkiewich, and Lee Trad. Colin, the past Chair, has provided us with leadership both by heading the Council and through his work organizing and leading seminars. Lindsay, our treasurer for the past two years, has provided able financial stewardship. Lee has worked hard to make the spring SOA meetings a success.

I would also like to welcome our new members: John Kalnberg, Marilyn Miller Oliver, and Zenaida Samaniego. Judging from their enthusiastic participation in our meetings thus far, I think the membership has chosen wisely in selecting them for the Council. Finally, I would like to recognize our officers for the upcoming year: Vice-Chair Paul Angelo, Treasurer John Kalnberg, and Secretary John Wade.

I'll return now to the issue of communications. In the upcoming year, we plan to make greater use of our space on the SOA's Web site to enhance communications between the Council and the Pension Section members *(http://www.soa.org/sections/pen.html*) — both to solicit your ideas, as well as to let you know what we're working on.

In the past, we have invited feedback by conducting surveys or by inviting you (in columns like this one) to contact individual members of the Council directly. Each of these approaches has limitations — surveys are a major undertaking, while invitations appearing in the middle of the "Chairperson's Corner" may not generate a lot of response. In order to increase the likelihood that we'll hear from you, we are adding a feedback area on our Web site so that you have a convenient method of sharing your ideas with us whenever inspiration strikes. We will discuss your thoughts during the Council's monthly conference calls or at our quarterly meetings and then report back to you. I particularly welcome ideas on how we can better use our space on the Web to fulfill our mission.

We have a few other Web-related projects that I'd like to report on. The most exciting of these is the release of the Pension Actuarial Basics Course.

The Pension Actuarial Basics Course Is Up and Running!

Forgive my enthusiasm, but this course has been our top priority for some time now, and I want to make sure that you are aware of it. I think you will find it an excellent resource for all those new to the pension field. Maintaining and expanding this course will be a permanent order of business for the Council. Please see the article in this issue by Adrien La Bombarde, the chief architect of the course, for more details.

Other plans for using the Web to enhance communication with our members include:

- Soliciting candidates for our upcoming elections — so if you're interested in joining us, you can let us know.

- Immediate posting of *Pension Section News* on the Web. We will also send out a blast e-mail with a link to the latest issue.

- A permanent posting of our mission and our current projects. Those of you who wonder "what does the Pension Section Council do?" (which would have included me three years ago) will find a ready answer. In the meantime, if you're interested in our mission, I refer you to the March 2000 Chairperson's Corner in which Colin England does an excellent job of explaining it. (For those of you who don't carefully file away your past issues of Pension Section News, you can find the column at *http://www.soa.org/library/sectionnews/pension/PSN0003.pdf*)

I'm sure there are many other possible uses of the Web that we haven't considered yet. That's where you come in. I look forward to hearing from you.

Bruce Cadenhead, FSA, MAAA, EA, IAA, is principal of William M. Mercer Inc. in New York, NY. He is chairperson of the Pension Section Council and can be reached at Bruce.Cadenhead@us.wmmercer.com.

Lump Sums and Benefit Adequacy
continued from page 1

- The retiree and/or the spouse of the retiree may outlive assets. Depending on whether governmental programs are available and adequate, this can be a disaster.
- Some retirees will spend their assets too fast, and have a great retirement early, only to find a big decline in living standards as the years go by.
- The retiree may not have good investment results. Those who choose to take more risk may get more rewards on average, but some of them will lose. People investing in equities at the wrong time can do poorly. Besides investing poorly, some retirees may be victims of fraud.
- Some retirees will be afraid to spend their principal and may live at too low a level rather than enjoying their retirement resources.

From an employer's point of view, it is a mixed story as well. If the plan's objective is to provide retirement income, lump sums don't work well. But, if the company is working to instill more individual responsibility, it does not make sense not to permit lump sums. For employees who work at several different jobs that build retirement assets, lump sums are more logical. Furthermore, one of the key reasons for providing pensions and other benefits is to win employee appreciation, and employees prefer lump sums.

The bottom line is that lump sums produce a great result for some people, and they are a disaster for others. Where lump sums are used, it is important for employees to have access to good information and products to help them plan for the post employment period. Some of the risks of the post employment period include outliving assets, becoming frail, losing a spouse, inflation, unexpected medical costs, investment risks, and unexpected needs on the part of other family members. Many retirees are not well positioned to deal with these risks.

Uses of lump sums when they are paid

EBRI did an analysis of the 1993 CPS. They looked at how lump sums were used by 12,361 recipients and found the uses as shown on the following table.

Use of all or part of lump sum	% of Receipients
Tax qualified savings	41.5%
Non-tax qualified savings	17.0%
Home, business, pay off debt	30.5%
Education	2.9%
Consumption	38.3%

Numbers add to more than 100% since some individuals used their lump sums for multiple purposes. EBRI also asked about use of lump sum distributions in the 1996 Retirement Confidence Survey, and found that:

Use of all or part of lump sum	% of Receipients
Spent it	50%
Rolled over at least a part into	46%
another retirement plan	
Put it into other savings	27%
None of these	3%

EBRI continues to monitor this issue. These studies show that leakage is an issue; many people spend part or all of their lump sums for non-retirement purposes. One can view this as a problem in different ways. People will not have enough assets to retire. Alternatively, it can be viewed as a problem because funds were allowed to accumulate on a tax-deferred basis in order to support retirement and they are not being used for retirement.

Where Do Immediate Annuities Fit In?

Immediate annuities are not very popular in the United States, and not very many are sold. The September *Actuary* includes a panel discussion on matters relating to the sale of annuities. It is unlikely that many of the people who choose lump sums will then buy annuities. These products convert assets to income that can not be outlived, but may not be inflation protected.

Why are few sold? There is relatively little focus on outliving assets and on post-retirement risks. People working with U.S. retirement systems need to encourage such a focus. To date, too much of the focus has been on the pre-retirement period. Maybe annuities are too expensive. Views differ on this topic, but in any case, it seems likely that many of the people who buy annuities do not appreciate the cost and value of investment and mortality guarantees. Few offer inflation protection. As was discussed in the *Actuary*, design enhancements might make annuities more attractive. Financial planners and advisors generally recommend against annuities — they see maintaining control of assets as a greater priority.

Is this a problem? There is a decline in economic status at time of widowhood. While many retirees are well off, others are struggling.

Benefit Adequacy Today

The traditional definition of benefit adequacy called for focusing on income at retirement age based on the assumption that at retirement, the retiree would leave the workforce by moving from a full time job to retirement. In fact, today retirement has become much more of a process. Many people will leave the workforce in a series of steps, phasing out by taking one or more bridge jobs after they leave a long service or career job.

In this framework, we need to rethink adequacy and what it means. Is it an amount built by each person based on their budget, or is it an amount linked to the poverty level or some multiple of it? In many organizations, considerations of adequacy have shifted from the employer to the employee, but the problem does not go away.

So, Where Does This Leave Us?

There are strong pros and cons of lump sums — it is not a one-way story. As the baby boom is aging, we have a lot of questions to think through at all levels — from a policy perspective, as employers, and as individuals. While we are thinking through questions in the United States, those working in other countries also have issues to think through.

My questions and challenges for U.S. public policy makers are as follows:

- How do we support appropriate retirement income levels? What do we mean by appropriate?
- Will lump sums in private plans be good or bad and for whom? Should they be allowed in tax favored plans? Should they be extended to Social Security benefits?
- What is the safety net for those who are in poverty or near poverty?
- Are we concerned about the needs of groups who are less well off including widows and divorced persons?

The challenges I see for employers are as follows:

- How can we compete for the right people?
- How can we enhance satisfaction through our retirement programs? Can they become more meaningful in the competition for people?
- How do lump sums affect retirement behavior?
- How can we balance the interests and needs of employees who leave early with those who stay for a career? What should be our priorities in this regard?
- How do we enhance retention?

The challenges for individuals are many and include the following:

- How can I understand post employment risks?
- How does my family plan for retirement on both a family and individual basis? How can each family be assured that the program will work in the event of a divorce or a premature death of a spouse?
- What are the options to not outlive assets?
- What is the best way to invest my money?

All of these are touchy questions, and there are a lot of trade-offs in any approach to their solution. What works for one individual, or family, may be inappropriate for another. This leaves actuaries with many opportunities. I will close with a few suggestions about them. We should get employers, the public, and policymakers to focus more on post employment risks and how to manage them. We need to improve the products that are available for their management. It is a big issue to help all of us use our retirement assets effectively. As actuaries, we can make a difference in these big issues.

Anna M. Rappaport, FSA, MAAA, FCA, EA, is a consulting actuary at William M. Mercer Inc. in Chicago. She is a former president of the Society of Actuaries and can be reached at anna.rappaport@us.wmmercer.com.

Summary of 2001 IRC, PBGC, Federal Income Tax, Social Security, and Medicare Amounts

by Heidi Rackley

IRC Qualified Retirement Plan Limits

IRS annually adjusts qualified plan limits for increases in the cost of living. The 2001 limits reflect a 3.5% increase in third quarter CPI-U from 1999 to 2000, and they are rounded down to multiples of $50, $500, $5,000, or $10,000. The table below shows the 2001 limits before rounding and a five-year summary of rounded IRC qualified plan limits.

IRC Limit	*Unrounded 2001*	*Rounded IRC Limits* 2001	2000	1999	1998	1997
401(k) plan elective deferral limit	$10,973	$10,500	$10,500	$10,000	$10,000	$9,500
403(b) plan elective deferral limit	10,973	10,500	10,500	10,000	10,000	9,500
Eligible 457 plan deferral limit	8,717	8,500	8,000	8,000	8,000	7,500
SIMPLE plan elective deferral limit	6,600	6,500	6,000	6,000	6,000	6,000
415 defined benefit maximum annuity	141,075	140,000	135,000	130,000	130,000	125,000
415 defined contribution maximum annual addition	35,625	35,000	30,000	30,000	30,000	30,000
401(a)(17) and 408(k)(3)(C)compensation limit	178,125	170,000	170,000	160,000	160,000	160,000
414(q)(1)(B) highly compensated employee and 414(q)(1)(C) top-paid group	88,000	85,000	85,000	80,000	80,000	80,000
408(k)(2)(C) SEP minimum compensation	470	450	450	400	400	400
409(o)(1)(c) tax-credit ESOP distribution period						
5-year maximum balance	783,750	780,000	755,000	735,000	725,000	710,000
1-year extension	156,750	155,000	150,000	145,000	145,000	140,000

Other Benefit-Related IRC Limits

Qualified transportation fringe benefit limits are adjusted annually after 1999 and medical savings account (MSA) limits are adjusted annually after 1998. The 2001 limits reflect the 3.1% increase in the average CPI-U for the 12 months ending August 31. The qualified transportation fringe benefit limits are rounded down to a multiple of $5, while the MSA limits are rounded to the nearest multiple of $50.

Qualified long-term care (LTC) premium limits are adjusted annually after 1997. The 2001 limits reflect the 4.2% increase in the medical care component of the CPI from August 1999 to August 2000, and are rounded to the nearest multiple of $10.

The table on the next page shows these rounded IRC limits for 1997 through 2001.

IRC Limit	2001	2000	1999	1998	1997
132(f) tax-free qualified transportation fringe benefit					
Parking	$180	$175	$175[1]	$175	$170
Transit passes or commuter highway vehicle transportation	65	65	65[1]	65	65
220(c)(2) MSA high deductible health plan – self-only coverage					
Minimum annual deductible	1,600	1,550	1,550	1,500	1,500
Maximum annual deductible	2,400	2,350	2,300	2,250	2,250
Maximum out-of-pocket limit	3,200	3,100	3,050	3,000	3,000
220(c)(2) MSA high deductible health plan – family coverage					
Minimum annual deductible	3,200	3,100	3,050	3,000	3,000
Maximum annual deductible	4,800	4,650	4,600	4,500	4,500
Maximum out-of-pocket limit	5,850	5,700	5,600	5,500	5,500
213(d) qualified LTC premium limits					
Age 40 or less	230	220	210	210	200
41 – 50	430	410	400	380	375
50 – 60	860	820	800	770	750
61 – 70	2,290	2,200	2,120	2,050	2,000
Over 70	2,860	2,750	2,660	2,570	2,500
7702B(d)(4) qualified LTC contract per diem limit	200	190	190	180	175

[1] IRC section 132(f) was amended effective for tax years beginning after 1998; the 1999 limits were set to $175 and $65, indexed after 1999.

PBGC Guaranteed Benefits

The maximum PBGC guaranteed monthly benefit is adjusted annually based on changes in the Social Security "old law" contribution and benefit base. For a single-employer defined benefit plan terminating in 2001, the maximum guaranteed benefit will be $3,392.05 per month — a 5.3% increase over the 2000 limit of $3,221.59. This amount is adjusted if benefit payments start before age 65 or benefits are paid in a form other than a single-life annuity.

Federal Income Tax Factors

Federal income tax factors are adjusted annually based on year-to-year changes in the average CPI-U for the 12 months ending August 31. Federal income tax factors increased 3.1% from 2000 to 2001, before rounding.

(continued on page 8)

Summary of 2001 IRC, PBGC, Federal Income Tax, Social Security, and Medicare Amounts

continued from page 7

Item and Filing Status	***2001***	***2000***
Personal Exemption	$2,900	$2,800
Standard Deduction		
Single	4,550	4,400
Head of Household	6,650	6,450
Married, Filing Jointly	7,600	7,350
Married, Filing Separately	3,800	3,675
Additional Standard Deduction (for elderly or blind)		
Unmarried	1,100	1,100
Married	900	850
"Kiddie" Deduction	750	700
Breakpoint between 15% and 28% rates		
Single	27,050	26,250
Head of Household	36,250	35,150
Married, Filing Jointly	45,200	43,850
Married, Filing Separately	22,600	21,925
Breakpoint between 28% and 31% rates		
Single	65,550	63,550
Head of Household	93,650	90,800
Married, Filing Jointly	109,250	105,950
Married, Filing Separately	54,625	52,975
Breakpoint between 31% and 36% rates		
Single	136,750	132,600
Head of Household	151,650	147,050
Married, Filing Jointly	166,500	161,450
Married, Filing Separately	83,250	80,725
Breakpoint between 36% and 39.6% rates		
Single	297,350	288,350
Head of Household	297,350	288,350
Married, Filing Jointly	297,350	288,350
Married, Filing Separately	148,675	144,175

Personal exemptions are phased out for taxpayers whose adjusted gross incomes exceed specified amounts (which vary by tax filing status). For 2001 these "threshold amounts" at which phase-out begins and ends are:

Filing Status	*Phase-out begins at*	*Phase-out completed after*
Unmarried	**$132,950**	$255,450
Head of Household	166,200	288,700
Married, Filing Jointly	199,450	321,950
Married, Filing Separately	99,725	160,975

Total itemized deductions for 2001 are reduced by 3% of a taxpayer's adjusted gross income in excess of $132,950 ($66,475 for married, filing separately), an increase from $128,950 in 2000 ($64,475 for married, filing separately).

Certain taxpayers are entitled to an earned income tax credit (EIC) equal to the maximum credit amount reduced by the phase-out amount. The phase-out amount equals the product of the phase-out percentage (based on the number of qualifying children) multiplied by the excess, if any, of the taxpayer's modified adjusted gross income or earned income, whichever is greater, over the threshold phase-out amount.

	2001	*2000*
EIC maximum credit amount		
No qualifying children	$364	$353
One qualifying child	2,428	2,353
Two or more qualifying children	4,008	3,888
EIC threshold phase-out amount (and percentage)		
No qualifying children (7.65%)	**5,950**	5,770
One qualifying child (15.98%)	**13,090**	12,690
Two or more qualifying children (21.06%)	**13,090**	**12,690**

Social Security and Supplemental Security Income Amounts

Social Security benefits payable December 31, 2000, will increase 3.5% — the increase in CPI-W from the third quarter of 1999 to the third quarter of 2000. The average monthly Social Security benefits before and after the December 2000 COLA are:

Average Monthly Social Security Benefit	*After 12/2000 3.5% COLA*	*Before 12/2000 3.5% COLA*
All retired workers	$845	$816
Aged couple, both receiving benefits	1,410	1,363
Widowed mother and two children	1,696	1,639
Aged widow(er)	811	**783**
Disabled worker, spouse, and children	1,310	1,266
All disabled workers	786	759

(continued on page 10)

Summary of 2001 IRC, PBGC, Federal Income Tax, Social Security, and Medicare Amounts

continued from page 9

The 2001 taxable wage base, determined from the change in deemed average annual wages from 1998 to 1999, will increase 5.5%. Other 2001 Social Security and Supplemental Security Income values are:

	2001	***2000***
Cost-of-living increase	3.5%	2.4%
Average annual wage (2nd preceding year)	$30,469.84	$28,861.44
OASDI contribution and benefit base (wage base)	80,400	76,200
"Old law" contribution and benefit base	59,700	56,700
Retirement earnings test exempt amount (annual)		
Under age 65 – all year	10,680	10,080
Attained age 65 (period before the month 65 is attained)	25,000	17,000
Age 65 (birth month and later)	No limit	No limit
Wages needed for a quarter of coverage	830	780
Maximum monthly Social Security benefit (worker retiring in January at age 65)	1,536	1,433
Bend-points—PIA formula applied to average indexed monthly earnings (AIME)		
90% of AIME up to	**561**	**531**
32% of AIME over first bend-point up to	3,381	3,202
15% of AIME over second bend-point		
Bend-points—maximum family benefit formula applied to worker's PIA		
150% of PIA up to	717	679
272% of PIA over first bend-point up to	1,034	980
134% of PIA over second bend-point up to	1,349	1,278
175% of PIA over third bend-point		
SSI federal payment standard (monthly)		
Individual	530	512
Couple	796	769
SSI resources limit		
Individual	2,000	2,000
Couple	3,000	3,000
FICA tax rates		
OASDI employer and employee	6.20%	6.20%
HI employer and employee	1.45%	1.45%
OASDI self-employed	12.40%	12.40%
HI self-employed	2.90%	2.90%
Maximum OASDI employee payroll tax	$4,984.80	$4,724.40

Covered Compensation

Covered compensation determines permitted and imputed disparity limits for qualified retirement plans. In lieu of using the actual covered compensation amount, qualified plans may determine permitted or imputed disparity using a rounded covered compensation table published annually by IRS. IRS has not yet published the 2001 rounded covered compensation table. The 2001 rounded table shown below is rounded to the nearest $3,000 (but not more than the 2001 OASDI taxable wage base of $80,400). This is the same rounding method used in the 2000 rounded covered compensation table published by IRS in Revenue Ruling 99-47.

Calendar Year of Birth	*Social Security Retirement Age*	*Calendar Year of Social Security Retirement Age*	*Covered Compensation*		*Rounded Covered Compensation*	
			2001	*2000*	*2001*	*2000*
1906	65	1971	4,320	4,320	3,000	3,000
1907	65	1972	4,488	4,488	3,000	3,000
1908	65	1973	4,704	4,704	6,000	6,000
1909	65	1974	5,004	5,004	6,000	6,000
1910	65	1975	5,316	5,316	6,000	6,000
1911	65	1976	5,664	5,664	6,000	6,000
1912	65	1977	6,060	6,060	6,000	6,000
1913	65	1978	6,480	6,480	6,000	6,000
1914	65	1979	7,044	7,044	6,000	6,000
1915	65	1980	7,692	7,692	9,000	9,000
1916	65	1981	8,460	8,460	9,000	9,000
1917	65	1982	9,300	9,300	9,000	9,000
1918	65	1983	10,236	10,236	9,000	9,000
1919	65	1984	11,232	11,232	12,000	12,000
1920	65	1985	12,276	12,276	12,000	12,000
1921	65	1986	13,368	13,368	12,000	12,000
1922	65	1987	14,520	14,520	15,000	15,000
1923	65	1988	15,708	15,708	15,000	15,000
1924	65	1989	16,968	16,968	18,000	18,000
1925	65	1990	18,312	18,312	18,000	18,000
1926	65	1991	19,728	19,728	21,000	21,000
1927	65	1992	21,192	21,192	21,000	21,000
1928	65	1993	22,716	22,716	24,000	24,000
1929	65	1994	24,312	24,312	24,000	24,000
1930	65	1995	25,920	25,920	27,000	27,000
1931	65	1996	27,576	27,576	27,000	27,000
1932	65	1997	29,304	29,304	30,000	30,000
1933	65	1998	31,128	31,128	30,000	30,000
1934	65	1999	33,060	33,060	33,000	33,000

(continued on page 12)

Summary of 2001 IRC, PBGC, Federal Income Tax, Social Security, and Medicare Amounts

continued from page 11

Calendar Year of Birth	*Social Security Retirement Age*	*Calendar Year of Social Security Retirement Age*	*Covered Compensation*		*Rounded Covered Compensation*	
			2001	*2000*	*2001*	*2000*
1935	65	2000	35,100	35,100	36,000	36,000
1936	65	2001	37,212	37,092	36,000	36,000
1937	65	2002	39,312	39,072	39,000	39,000
1938	66	2004	43,464	42,984	42,000	42,000
1939	66	2005	45,540	44,940	45,000	45,000
1940	66	2006	47,616	46,896	48,000	48,000
1941	66	2007	49,656	48,816	51,000	48,000
1942	66	2008	51,648	50,688	51,000	51,000
1943	66	2009	53,568	52,488	54,000	51,000
1944	66	2010	55,452	54,252	54,000	54,000
1945	66	2011	57,312	55,992	57,000	57,000
1946	66	2012	59,148	57,708	60,000	57,000
1947	66	2013	60,936	59,376	60,000	60,000
1948	66	2014	62,580	60,900	63,000	60,000
1949	66	2015	64,140	62,340	63,000	63,000
1950	66	2016	65,580	63,660	66,000	63,000
1951	66	2017	66,960	64,920	66,000	66,000
1952	66	2018	68,232	66,072	69,000	66,000
1953	66	2019	69,444	67,164	69,000	66,000
1954	66	2020	70,620	68,220	72,000	69,000
1955	67	2022	72,756	70,116	72,000	69,000
1956	67	2023	73,764	71,004	75,000	72,000
1957	67	2024	74,700	71,820	75,000	72,000
1958	67	2025	75,528	72,528	75,000	72,000
1959	67	2026	76,296	73,176	75,000	72,000
1960	67	2027	77,004	73,764	78,000	75,000
1961	67	2028	77,664	74,304	78,000	75,000
1962	67	2029	78,228	74,748	78,000	75,000
1963	67	2030	78,780	75,180	78,000	75,000
1964	67	2031	79,284	75,564	80,400	75,000
1965	67	2032	79,704	75,864	80,400	76,200
1966	67	2033	80,052	76,092	80,400	76,200
1967	67	2034	80,280	76,200	80,400	76,200
1968 or later	67	2035	80,400	76,200	80,400	76,200

Medicare Premiums and Deductibles

Medicare premiums, coinsurance, and deductible amounts changed little from 2000 to 2001:

	2001	***2000***
Part A—Hospital Insurance		
Inpatient hospital deductible	$792.00	$776.00
Coinsurance		
– Daily coinsurance payment for 61-90 days of inpatient hospital care	198.00	194.00
– Coinsurance for up to 60 lifetime reserve days	396.00	388.00
– Daily coinsurance payment for 21 - 100 days in a skilled nursing facility following a hospital stay of at least three days	**99.00**	**97.00**
Voluntary premium for persons not eligible for monthly benefits	300.00	301.00
Alternative reduced premium for persons with 30 – 39 credits	165.00	166.00
Part B—Medical Insurance		
Annual deductible	100.00	100.00
Monthly premium	50.00	45.50

Heidi Rackley, FSA, MAAA, FCA, EA, is a consulting actuary at William M. Mercer Inc. in Seattle, WA. She is a member of the Pension Section and can be reached at heidi.rackley@us.wmmercer.com.

Retirement Systems Practice Advancement Committee

December 6, 2000 - Rosemont, Illinois

Attendees:
Neil Parmenter, Vince Amoroso, Joe Applebaum, Bruce Cadenhead, Dan Cassidy, Ethan Kra, Anna Rappaport, Bill Reimert, James Turpin, Nancy Yake, Judy Anderson, Tom Edwalds, Sandy Rosen

Key Issues & Strategic Planning

The Committee discussed the list of key issues distributed at the October Board of Governor's meeting and a list of 2000-2001 issues and continuing activities for the Retirement Systems practice area prepared by Neil Parmenter and Judy Anderson. Both of these items are attached.

Changes suggested were:

- Stronger global awareness should be added to the key issues for the actuarial profession
- Some of the key issues listed for the retirement actuary are equally applicable to other areas of the profession. These issues would include increased market volatility and changing demographics.
- The reference to cash balance plans should be broadened to include all innovative plan designs and benefit cutbacks.
- The changing emphasis in consulting firms is not away from core actuarial work but rather to expansion beyond core actuarial work.
- A reference to Medicare issues should be included as key for retirement actuaries.

It was noted that the key issues listed are focused on the external environment. Internal issues cited included:

- Is our selection process, (E&E, etc.), selecting candidates for technical roles rather than consulting roles?
- Is our E&E program useful for what retirement actuaries actually do?
- Have the layoffs of the early 90's left a gap in mid-level actuaries at the firms? Have the firms been hiring candidates of a lower caliber?
- Inappropriate barriers in the selection process that discourage qualified candidates should be removed.
- SOA leadership should establish stronger ties with employers of actuaries and corporate leaders.
- The value of the FSA designation may have declined among employers of retirement actuaries. How can it be improved?

Committee on Retirement Systems Research

The Committee reviewed ongoing and new research projects with a focus on budget constraints and prioritizing.

Study of Turnover and Retirement Rates:
The data request was sent on 12/4/00 to 53 pension consulting firms (small and large), requesting Canadian & U.S. seriatim data. Data is to be submitted by end of February 2001. A Request for Proposal (RFP) is being prepared to identify researchers to create the database from the submissions and researchers to analyze the resulting database. The Practice Advancement Committee requested that the RFP be out before the end of the year and that funding come from the 2000 budget. After this data solicitation and analysis, the oversight group is planning on evolving this project into an annually updated experience study.

Retirement Implications of Demographic and Family Change:
This project began with a Call for Papers sponsored by the Committee on Social Security and 17 actuarial, government, employee benefits and research organizations. The papers will be presented at a symposium in autumn 2001. We have received 22 abstracts with two more forthcoming. Seven of the authors are actuaries. We have committed $10,000 for prizes. The decision on which abstracts to accept will take place this month. At that time, an additional amount, around $20,000, will be committed to cover authors' travel grants to symposium.

Retirement Risk Survey:
This project is a follow-up on the Retirement Needs Framework. The focus is to capture information on how retirees and those near retirement view financial risks in retirement. The working group is also interested in available methods to manage these risks (i.e., innovative annuity policies, long-term care, etc.). The intent is not to conduct our own survey, but rather to have an influence on researchers and their surveys. To date, the working group has talked to LIMRA and researchers working on the Health and Retirement Survey (HRS). A $10,000 budget has been earmarked for this project in 2001.

Cash Balance Call for Papers:
Eight papers will be presented on May 31 at a one-day seminar embedded into the Dallas Spring meeting. The deadline for the papers is March 31, 2001. We have committed $17,000 to cover travel grants for the authors.

Asset Valuation Methods:
The Asset Valuation Methods Survey Report and the five papers we will have received in response to our call for papers will appear in the Spring 2001 issue of the *Pension Forum*.

Mortality Projection and Pension Valuation:
Researchers were contracted to run pension projections testing the impact of

various approaches to reflecting mortality improvement. The final report is due early in 2001. The final payment for this project was budgeted and committed in 1999.

Demography and Rates of Return:
This project should begin with a literature search on how rates of return are impacted by demographic shifts. We will commit $20,000 in the 2001 budget to hire a researcher to conduct the search and write a critical bibliography.

Factors Affecting Retirement Mortality:
This project will address the various socioeconomic factors that have quantitative effects on mortality and consider ways to reflect these factors in application. Phase 1 of the project will be a literature search. Phase 1 has the potential for an unmanageably broad scope. The Practice Advancement Committee suggested limiting the focus to employee characteristics that an employer already would have available. The oversight group is hoping to grant the RFP to a good graduate student with an appropriate mentor. A budget commitment of $7500 will be made in 2001 for this initial phase of the project.

Macrodemographic Model:
The report, which surveys computer models addressing retirement policy issues, is still not completed. The end product would be a monograph that would have some educational value for actuaries and other professionals. About $50,000 out of $75,000 for phase 1 of the project, has been paid to the researcher. There are no plans to continue with phase 2 of the project, which would have cost an additional $35,000.

Canadian Pension Mortality:
This project is meant to produce a mortality table for Canadian private pension plans based on CPP and QPP experience. The project is still not complete, though it is well past the scheduled completion date. We have paid the researcher $7,000 out of $10,000 Canadian. If this project is not completed by 12/31/00, the Committee agreed with an earlier decision to terminate the project. Given some of the difficulties we have faced with the slow progress on the macrodemographic project and the Canadian pension mortality project, it was suggested that we consider including penalty clauses in our research contracts. These penalties would become effective if a project dragged on after a pre-specified date. Tom Edwalds will discuss this possibility with Bruce Iverson and SOA counsel.

Committee on Retirement Systems Professional Education & Development

Seminars:
Upcoming seminars include an Investment Boot Camp for Pension Actuaries, to be held in February in Toronto; and a seminar on Mergers & Acquisitions in the U.S. The Professional Education and Development Committee (RSPED) and the Pension Section Council are reviewing the catalog of topics for professional development credit to plan seminars for 2001. The Practice Advancement Committee was also asked for its suggestions. Several Committee members suggested surveying chief actuaries at some of the larger consulting firms for their input.

Committee members suggested that a two-day seminar be offered combining the Canadian and U.S. Pension Accounting Labs. Sessions and/or seminars with an international focus were also recommended. It was further suggested that more seminars be offered within SOA meetings giving the attendees a choice of attending the seminar only or the full meeting. Location was cited as being a critical factor in seminar attendance.

Web Page:
The RSPED Committee and the Pension Section are working on a Web page devoted to retirement systems practitioners. The content outline for the page was distributed at the meeting. It will include links to late-breaking topics (via the AAA and CIA web sites), discussion forums, useful statistics, publications, and research. The work on the initial version of the page should be completed early in 2001. Additions and modifications will continue to be made as needed.

SOA Annual Meeting:
The RSPED Committee will finalize its list of session topics on its December 8 conference call.

Specialty Guides:
The Practice Advancement Committee suggested that the RSPED Committee consider placing existing specialty guides online to the extent that they are up to date. Prior guides may be useful for research purposes but should include their publication date.

Committee on Social Security - Retirement and Disability Income

This Committee has primary responsibility for the Retirement Implications of Demographic and Family Change project and the Factors Affecting Retirement Mortality project. Both of these projects are described above under the Research Committee heading.

Earlier in the year, this Committee wrote a paper, "The Cost of Older Workers," which was presented at a National Academy of Social Insurance Symposium and will appear, in abridged form, in the Social Security Bulletin. The paper has also been submitted to the *NAAJ* for review.

New Projects:
The Social Security Committee is reviewing a Course 5 study note on Retirement Income Security Systems. They are also considering the following possible new projects:

- Fertility Rates – This would be comparable to the 1998 project on the impact of mortality improvement.
- Long-Term Equity Yields – A literature search to be done jointly with the Finance and Investment Practice Area
- Social Security Privatization – The International Experience

(continued on page 16)

Retirement Systems Practice Advancement Committee
continued from page 15

- Replacement Ratios – This would include assessing measures of poverty.
- Stochastic Modeling

Committee on Post-Retirement Benefits

A written report was submitted which highlighted the highly successful Retiree Group Benefit seminar and the work of the Medicare Technical Review Panel.

E&E Committee - Pension Education

Dan Cassidy reported on current syllabus work and the November 2000 administration of Course 8 Retirement Benefits. The Practice Advancement Committee commented positively on the copies of the November examination that had been sent to them.

A variety of issues regarding the E&E system were raised at the meeting:

- Employers need to know more about how the current examinations compare to the prior examinations. This is particularly important in terms of study time granted to candidates.
- Concerns about making the E&E system more useful for pension actuaries were discussed. Some felt that there was too little pension material in relation to readings on other financial security systems. Others had concerns about the material covered in the preliminary examinations and its relevance to pension actuaries.
- Earlier comments about employers questioning the value of FSA for pension actuaries were reiterated.
- The members of the Practice Advancement Committee discussed their approaches to setting a pass mark.

In summary, there is a clear need for communication between pension actuaries, their employers, and E&E to work on these issues.

The Qualification 2005 Task Force is looking for additional pension representation. The Committee members suggested an appeal to chief actuaries at consulting firms.

The Actuary

There are two "pension" issues each year. The May and September 2000 issues contained, respectively, a summary of the Retirement 2000 Conference and panels discussing annuities and long term care insurance.

The March 2001 issue will have an article on actuarial careers in the pension field. Anna Rappaport also suggested an article on activities in the SOA Retirement Systems Practice Area that addresses issues brought up in last September's *Actuary*. The September 2001 issue will tentatively be on the Aging Society or the Retirement Implications of Demographic and Family Change project. Anna is looking for input on next year's pension issues by June. She is also looking for an associate editor or editorial assistant who will be trained to succeed her.

Pension Section Spring Meeting:

Bruce Cadenhead reported that the Pension Section Council is expanding the number of sessions being offered at the Dallas Spring meeting with a greater emphasis on embedded seminars. Both the Cash Balance Symposium and the Changing Patterns of Retirement will be offered as both meeting sessions and stand-alone seminars. Separate marketing will be done for both of these seminars.

Pension Basics Course:

The Pension Section is sponsoring an online pension basics course that will be available, initially at no cost, on the Pension Web page. The course is designed to educate new hires at pension consulting firms and insurance companies. It can also be very useful as a reference source. The initial version of the course is complete and will be available online by the end of this year. The Pension Section has already begun discussions on modifications and additions for the next version of the course.

Electronic Newsletter Delivery:

The Section Council is finalizing the details of how it will provide electronic delivery of its newsletter. Electronic delivery is much more cost effective than printing and mailing.

Coordination with Other Actuarial Bodies/Liaison Reports

CIA:

The CIA is reorganizing its committees and council to a more function-oriented structure. Each functional area will have representation across geographic and practice areas.

ASB Pension Committee:

The Actuarial Standard of Practice (ASOP) on Benefit Illustrations has been exposed and comments are being reviewed. An exposure draft on Asset Valuation Methods for Pension Valuations will be out soon. There is also a push to put out an exposure draft on Actuarial Cost Methods. The AAA Board has also brought up the issue of who a consulting pension actuary's client is, (i.e., plan sponsor, participants, etc.). This issue has received particular attention in light of past press on cash balance plans.

The ASOP on Expert Testimony is up for review.

AAA:

The AAA Pension Practice Council and the Pension Committee are presenting the RP2000 mortality table to the United States government for approval as the standard for calculating "current liability." The Pension Practice Council will be publishing a practice note on setting economic assumptions soon. Work is also beginning on a new practice note dealing with FAS87 calculations for cash balance pension plans. Finally, a pension task force on professionalism recommended a review or evaluation of ABCD processes.

DRAFT -October 1, 2000

Key Issues for the Actuarial Profession

- Consolidation of the financial services industry
- Depressed equity markets for insurance companies
- Federal vs. state regulation – some movement towards more federal governance
- Building external relations with other organizations
- Competition from other quantitative professionals such as: CFSs, MBAs, Financial Engineers, and Risk Professionals (GARP members)
- Impact of technology and its impact on:
  - the distribution of financial services, and
  - financial risk modeling

Key Issues for the Retirement Actuary

- Changing demographics and the effect on retirement systems — public and private
- Cash balance plans: design, implementation, communication, and fairness issues and legal uncertainties
- Poor public perception of pension plans, employers and pension actuaries — further government regulation
- Changing emphasis in consulting firms — movement away from core actuarial work

Other Issues:

- Implications of increased market volatility and changing market characteristics on retirement plans
- Further decline in the use of defined benefit plans
- Changing structure of businesses and the effect on retirement plans
- Technical advances reflecting new technology but ahead of the systems in use (e.g. generational mortality tables)

Retirement Systems Practice Area - October 24, 2000

Issues and Continuing Activities for 2000-2001

- As noted above, the practice area has identified many potential continuing education programs. Our continuing focus will be on producing these programs and, for the time-insensitive ones, considering ways in which the programs can be repeated periodically.
- Over the past years, the Retirement Systems practice area has been enhancing the research being done. Frequently, we have wanted to make use of recent developments in statistical techniques but may not have had this expertise at our disposal. In addition, the focus of the practice area is on research that is useful to our practitioners. Often, modern theoretical methods are not presented in a context that is practical for actuarial application. Non-actuarial expert researchers may be able to apply advanced techniques but have presented results which are not easily adapted by practitioners. The RSPA Committee is discussing ways to improve theory and methods used in our research without sacrificing in any way the usefulness for practitioners.
- The Retirement Systems practice area has recently sponsored four programs that have brought together actuaries, economists, demographers, and other employee benefits professionals and academics:
  - Strategies for a Changing Workforce (*March 1998*)
  - The Retirement Needs Framework (*December 1998 and ongoing*)
  - Retirement 2000 (*February 2000*)
  - Retirement Implications of Demographic and Family Change (*current*)

The success of these programs is also helping to bridge the gap between academics and practitioners. These joint efforts should be expanded.

The relationships that inter-disciplinary programs establish and the increased visibility for the profession can only improve our future. In addition, we must maintain the good relations we have established with the other North American actuarial organizations.

- The publicity on cash balance pension plans has raised the interest in hybrid plan design and the role of the actuary. The practice area has continued its research into cash balance and hybrid plans by sponsoring a call for papers. Perceptions and future legal and regulatory uncertainties may increase the need for further work.
- Changing demographics will impact both public and private retirement programs. Actuaries and the SOA should be included at the forefront of discussion of these issues.

Why I Like J

by Brian Bambrough

I drive a late-model minivan. It has everything I need for my lifestyle. Lots of space. Seats which I can remove or install, depending on my need of the moment. Power windows, A/C, etc., etc. I am totally happy with it. Yet if an auto company said to me "we've got a new minivan with lots of new features including GPS, built-in computer and anti-gravity, and you can have it at a fraction of what you paid for your old minivan," I would switch in a heartbeat.

Such is my relationship with APL and J. APL is a wonderful language for actuarial work. It can manipulate arrays easily. It's an interpreter, so it's easy to debug code. It has powerful and flexible string handling capabilities with which to create output. Nothing could be simpler or more convenient than component files.

So why switch to J? Because J has everything APL has and a whole lot more. When I am asked to describe what J is like, and there is no time for a detailed answer, I simply say "J is APL on steroids." For some years I have been learning J in scraps of my spare time. Now I am working on my first commercial system. So I still have a lot to learn. With this as context, here are just a few of the reasons I like J:

J uses ASCII text instead of APL characters. For example, the Greek iota has been replaced by i. This simplifies my life in several ways. I can use a text editor to write and edit code. It is easier to send code to clients and collaborators. It allows for a richer set of primitives.

Like APL, J has only a few data types: number, character, and box. I find boxing to be more intuitive, consistent, and easier to use than APL's enclose and disclose.

There are many additions and extensions to the language that are marvelous conveniences. Some of these are possible because of the expansion of the number of primitives. For example, monadic {. is "head." This returns the first item in an array. There is also "tail," "behead," and "curtail." Others are brand new capabilities. For example, "infix" acts on successive groups of items in an array. In actuarial work, infix allows me to produce dxs from a survivorship group, lx, with: dx =: 2 -/\ lx. There are "nub" and "nub sieve" primitives. With them I can, for example, identify all the unique combinations of plan, issue age, duration, and underwriting class in a block of policies. The primitive i. is an example of an extension. i.4 returns a 4 element vector, 0 1 2 3, just like iota, in APL. But i.2 3 returns a matrix with two rows and three columns.

J has a symbol for infinity. It is the underline. Why would anyone living in a finite world need infinity? Well, J also has a power conjunction. This is similar to raising a number to a power. For example, 2 cubed means multiply 2 by itself three times. The power conjunction generalizes this to apply to any verb (the J name for function, or subprogram). The power conjunction instructs the verb to keep feeding its result back into itself a specified number of times. If this number is infinity, the verb will only stop if the verb's output is the same as the input, i.e., the process converges. This allows incredibly compact and efficient code to get the solution to problems such as finding the yield from a messy cash flow stream.

The power conjunction is also useful when its argument is finite. For example, to get second differences apply infix twice. Suppose q is a column of qxs that the user has just entered by hand. How can you help him check for errors? Get the second differences: diff =.2 –/\^:2 q. Then flag those that are not reasonable.

J is totally consistent. Concepts stretch across the entire language; for example, "item" is a technical term in J. The items of lx are the number of lives surviving at each age. The items of a table are the rows, the items of a 3 dimensional array are the tables, etc. This idea finds an application in J's "for" control structure. In BASIC we have "for i = 1 to n." In J we have "for_i. array do." In J, the for loop sequentially assigns to i the items of array. This is a powerful and useful generalization.

J has a very powerful grid feature. It's much more than a spreadsheet. It can be used to input, manipulate, and display data in any way that you can imagine. It can also handle infinite arrays, not much use in actuarial work, but intrinsically fascinating.

So, J has a lot of neat features, but what about building complete systems?

When I develop a system, I just write a script (the J term for program or module), run it, and look at the results, just like APL. When it's working right, I call it from the main module. A major feature of this approach is that each script can, if appropriate have its own locale, the J term for name space. Names can be global in a locale, but they don't collide with the same names in other locales. APL workspaces have their virtues, but in this respect J is superior.

The GUI for a system can be created in a manner similar to other languages: set up a form, drag and drop controls on it, and use point and click to set the controls' attributes. J also allows me to create controls and otherwise modify the form at run-time. That this can be done easily (or at all) distinguishes J from most other languages.

Is there any downside to J? Possibly a couple of things:

J, like any interpreter, runs slower than compiled languages. This is generally not a problem due to the array processing nature of the language. In those instances where a large amount of number crunching is required, and it must be done by looping, I use another language to compile this logic, then call it from my J code.

The only other problem with J is that its environment and add-ons constitute a huge amount of material. For an actuary who just wants to use the language to solve problems, it is critically important to delimit the amount of material he or she will try to absorb at first.

A good approach is to take a modest problem, say a spreadsheet that is becoming unwieldy, and learn enough to implement it in J as a single script. This can be done by learning a few primitives, how to write verbs and, possibly, some file handling. The material that can be ignored includes: most of the primitives; hooks, forks and trains; concepts like gerund and obverse; OOP; grids; ODBC; the Project Manager; mapped files and a whole lot more. Even locales and the GUI can be ignored at first.

My overall judgement of J is that I can be more productive with it than any other language, and it is a joy to work with. I plan to use it as my main programming language for the rest of my working life.

Brian Bambrough, FSA, is president of Bambrough & Associates Inc. in Kalamazoo, MI. He can be reached at b.bambrough@worldnet.att.net.

Pension Section Council Meeting Minutes

June 12, 2000 - Sheraton Gateway Suites, O'Hare

Attendees:
Colin England (Chairperson), Bruce Cadenhead, Lindsay Malkiewich, Paul Angelo, Adrien La Bombarde, Tom Lowman, Ethan Kra, Sylvia Pozezanac and Judy Anderson and Lois Chinnock (SOA staff).

1. The minutes of the 3/26/00 meeting and 4/28/00 conference call were approved as submitted.

2. **Treasurer's Report - Lindsay Malkiewich**
The Council reviewed the budget and discussed current and future expenses. The members felt that a deficit of $25,000 for 2000 would be reasonable.

3. **Pension Basics Course**
Lois Chinnock relayed Barbara Choyke's comments regarding putting the pension basics course online.

The Council discussed the online course and then reaffirmed the decision not to charge for the use of the program. Sylvia Pozezanac volunteered to contact Debbie Jay, SOA Web Coordinator, for answers to questions about putting the course on the Pension Section Web page before the next conference call (July 21).Colin will write an introductory paragraph by the next conference call. Tom Lowman will draft a questionnaire asking for comments from those taking the course for the next call. Colin and Paul will assist.

On the July 21, call the Council will finalize the questionnaire, discuss the logistics of putting the course on the Web page and reaffirm the goal to have the course on the Pension Section Web page by the next meeting (September 18).

4. **Practice Area Update - Judy Anderson**
Judy proposed that the Pension Section work with the Retirement Systems Professional Education and Development Committee to create a pension actuary's Web page to link SOA material and external Web sites that would be of interest to the pension actuary. Sylvia Pozezanac volunteered to work with members of the Committee to develop the Web page.
The 2000 Mortality Study is being presented to the SOA Board for acceptance in June. Lindsay commented that it is a good report, one that is important to pension people.

Judy reported that the practice area has received nine abstracts in response to the call for papers on cash balance plans. The deadline for final papers is March 1, 2001. The papers will be published in the *Pension Forum*.

The Turnover and Retirement Rates Experience Study Task Force has circulated a pilot test of the data request to a small group of potential contributors for feedback. The Committee on Social Security — Retirement and Disability Income — is working on a call for papers on Demographic and Family Issues for Social Security.

The practice area has received four completed papers, with two more coming, on the effectiveness of different asset valuation methods.

5. **2000 Seminars**
The Pension Section is co-sponsoring five seminars in 2000: Cash Balance Plans in June in Boston (Tom Lowman); Experience Analysis & Actuarial Assumptions in July in Chicago (Bruce Cadenhead);. Public Employee Plans in October, probably in Orlando (Tom Lowman); Pension Accounting Lab, not yet scheduled, probably in October (Lee Trad); Mergers & Acquisitions in December or January (Colin England).

At the next meeting the Council will review the 2000 seminars and begin planning the seminars for 2001. The Council discussed using the results from the 1998 survey for seminar planning. Lois will distribute the survey and results to the Council members.

6. **2001 Spring Meeting Planning**
The Council reviewed the 2000 spring meeting sessions and discussed the possibility of trying a seminar-type format next year in Dallas to increase the session variety and hopefully to attract more pension actuaries to the meeting.
Assuming the availability of more session slots, the Council would like to run three tracks throughout the meeting, perhaps two seminars and one miscellaneous track. Topics such as retiring medical, communications, cross-testing and cash balance plans (papers) were suggested. Judy will redistribute the PD catalog of subjects/ topics and the further discussion will occur during the July Council conference call.

7. **Statistics for Employee Benefits Actuaries**

Judy led a discussion of Tables 8-15. Her prior sources for this information are no longer doing the tables and because the Pension Section had expressed the desire to continue distributing them, Judy requested the help of the Council members. After going through the tables, it was decided that Judy would go ahead with all tables except Tables 12, 14, and 15. Ethan Kra will ask Larry Bader to help with Tables 12, 14, and 15.

8. **Electronic Delivery of Newsletters**
Bruce Cadenhead distributed the council subcommittee's report of preliminary recommendations for electronic distribution of the Section newsletters. The Council discussed the options available and then voted to make the newsletter available to members electronically with no dues cut. Members would receive an e-mail message about the availability of the newsletter with a link to it. Colin will write an article about the electronic options for the third quarter newsletter.

9. **Alternative Memberships**
Colin will follow up on this topic for the next council meeting.

10. **New Business**
There will be no dues increase for 2001. Lois reported that the section election materials will be mailed by Friday, July 7. The ballots must be returned to the SOA office by Friday, August 4, 2000. Lois will send the Section By-Laws to the Council members.

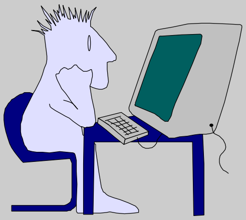
11. **Next conference call/meeting**
The next conference call for the Pension Section Council will be **Friday, July 21 at 10:00 Central Time.** Lois will send a reminder. The agenda will focus on the Pension Basics Course (the how-to's electronically, the questionnaire and the introductory paragraph from Colin) and the topics and speakers for the Spring 2001 meeting. The next meeting of the Pension Section Council will take place in Chicago on Monday, September 18. This meeting will focus on the 2001 spring sessions, the 2001 seminars and the Pension Basics Course.

Respectfully submitted,

Lois Chinnock, SOA Section Coordinator

Pension Actuarial Basics Course OnLine

by Adrian R. La Bombarde



The Society of Actuaries' new Pension Actuarial Basics Course offers an online primer of employer-sponsored pension plans from the perspective of actuarial practice. Developed under a Pension Section Council project, Basics presents the fundamental principles, design elements, operational activities, and regulatory framework that characterize current pension plans. Basics material is designed to provide a structured overview of essential pension concepts, together with introductory description of the functional role of the actuary with each particular aspect. We anticipate that Basics will be found useful for initial training of pension actuarial staff, general presentation of major pension themes to employers, and educational communications with the general public.

The first major section of Basics presents core fundamentals, including retirement savings concepts, pension plan design, and basic pension plan activities. A separate section describes the professional, regulatory, and business framework within which pension plans are established and operated. Material on the key actuarial areas of focus — funding and accounting for a defined benefit pension plan — is presented in a third section. The fourth major section deals with the key activities involved in pension plan operation and administration. Discussion throughout all sections is designed to explain critical issues on an elementary level intended to be suitable for explanation to someone who has little or no background on pensions.

Currently posted on the Society of Actuaries Web site (***http://www.soa.org/sections/pension/pensionbasics/war/basics/index.htm***), Basics should be viewed as an organic work in progress, possibly never to be completely finalized. As a generalized introduction, Basics is not intended to act as an ultimate authority on any particular pension topic. Yet, we anticipate that not only will the novice find Basics to provide a good beginning to a complicated subject, but even advanced, sophisticated users will be able to make good use of the organization and presentation of the material.

Imminent development will focus on providing dynamic content associated with several of the most essential operational activities, including benefit calculations, annuity conversions, and fundamental funding determinations. Additional modules will be developed for Social Security and other major supplemental blocks of material. Tools for improving use of Basics, including an online index and active links to other source materials, will be added. The structure of the online material is designed to eventually offer capabilities for customizing the course to specific training programs or specific plan types. Users of the Basics material can help all of this progressive development by including suggestions for topics, capabilities, or other changes via an online survey included on the Basics Web site.

Adrien R. La Bombarde, ASA, MAAA, EA, IAA, is a research actuary for Milliman and Robertson, Inc. in Houston, TX. He can be reached at adrien.labombarde@milliman.com.

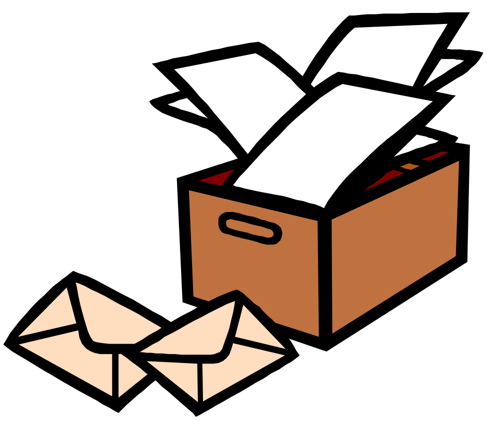
Call for Papers

The Society of Actuaries is organizing an international symposium titled Living to 100 and Beyond: Mortality at Advanced Ages to be held at the Swan Hotel in Walt Disney World, Florida, USA on January 17-18, 2002. The purpose of the international symposium is to bring together actuaries, demographers, gerontologists, and others interested in advanced age mortality to pool their knowledge and ideas. This symposium should serve as an impetus to produce analyses from population data, insurance and annuity records, retirement plan records, and other sources.

We are interested in papers that:

- Present compilations and analysis of data on mortality at advanced ages
- Discuss techniques for analysis of advanced age mortality data
- Discuss problems with data quality found in available data sets and techniques for dealing with these problems
- Present and justify theoretical models of advanced age mortality
- Identify factors that influence mortality at advanced ages and quantify their effect
- Present methods for quantifying and projecting advanced age mortality improvement
- Discuss other aspects of mortality at advanced age.

Abstracts are due by March 15, 2001. For more information, see the complete text of this Call for Papers on the SOA Web site at ***http://www.soa.org/research/living.html.***



Pension Forecasts, Part I: Some Questions

by Lawrence N. Bader

Note: This article will be presented in two parts. The first part, appearing below, describes a simplified problem in pension plan financing and presents two questions about how that pension plan can be modeled. We hope that readers will ponder these questions and perhaps be moved to respond. The second part of the article, in the next issue of this newsletter, will discuss the answers to the questions raised below and their implications for traditional actuarial models.

Consider this simplified pension plan and funding system. The liabilities consist of a single known benefit payment to be made 20 years from today. That benefit payment can be matched in timing and amount by a portfolio of 20-year zero-coupon Treasury bonds with a market value of $1 million. The plan assets also equal $1 million.

The company will make no interim contributions to or withdrawals from the plan. At the end of year 20, the company will wind up the plan by withdrawing the surplus or contributing to cover the deficit. (We ignore taxes and assume that there is no risk of default by the company.)

The corporate sponsor of this plan asks for your help. The assets are currently invested in the matching Treasury portfolio, which will ensure full funding of the plan with a company cost of zero. The sponsor believes that, over a 20-year horizon, equity investments would give rise to potential withdrawals that greatly outweigh the potential contributions in both probability and magnitude. So he asks you *Question #1: Ignoring taxes, how would shifting the $1 million from Treasuries into equities affect shareholder value?*

You decide to use a pension forecasting model. You prepare a series of 20-year simulations that show a range of terminal company contributions or withdrawals. To provide a single answer to Question #1,

you need to discount each of these terminal payments to a present value. This presents *Question #2: What discount rate should you use — the Treasury yield, the expected return on the plan assets, the company's borrowing rate, the company's weighted average cost of capital, or some other rate?*

Lawrence N. Bader, FSA, MAAA, is a retired member of the Society of Actuaries. He can be reached at larrybader@aol.com.

Termination and Retirement

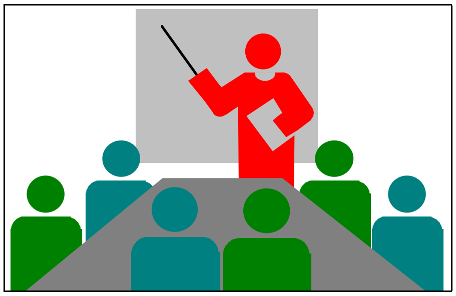
The Society of Actuaries' (SOA) Non-Mortality Decrements Task Force is embarking on a new study of termination and retirement rates for employer-sponsored pension and post-retirement medical plans. The objective is to produce a series of termination and retirement rate tables reflecting the variety of plan characteristics appropriate for selecting valuation assumptions. After the initial tables are produced, the Task Force is planning on this project evolving into a regularly updated experience study.

The SOA has contacted an actuary at each of 53 pension consulting firms and insurers soliciting U.S. and Canadian data for this project. These firms are being asked to submit beginning and end of year census data for active participants for five or more plans for five recent years. All data will be kept confidential as to the plan source and the submitter.

The Task Force needs your support! If you did not receive a data request and can support this worthwhile project by submitting data, please contact Julie Rogers at (847) 706-3556 or *jrogers@soa.org* as soon as possible. Your contribution to this project is valuable and will help to create a valuable resource for all pension actuaries.

Continuing Education Update

by Barb Choyke



Here we are already moving swiftly through 2001! May this year bring you health and happiness and many, many SOA continuing education programs. The program committees and staff are working hard at identifying and developing a wide range of topics and formats to help you satisfy your need for learning. So far this year, we have the following topics and formats lined up with many more to come. Keep your eyes posted on the SOA Web site for updates in programs, changes, and just plain ol' information. Put *www.soa.org* in your *favorites* category. And what about those of you with a burning desire (and maybe not so burning desire) to present at one of our programs? Let us know. Tell us who you are and what your area of expertise is, and we will make sure you are considered for opportunities that open up. Want to serve on a committee or task force? The SOA is always looking for volunteers who want to serve the association by providing talent in many different ways. The Continuing Education Coordinating Committee and Program Committees are looking for members who are not timid about sharing ideas and helping set the course for actuarial learning. We guarantee you will be a part of the fast-paced environment and be appreciated for your contributions and have fun to boot! Contact me (*bchoyke@soa.org*) or Sandy Krones (*skrones@soa.org*) to find out how to become part of the CE team. Now, here's what's ahead for Retirement Practice professionals: (remember, there's more to come, so watch that Web site, and this is the last year of the three-year enrollment cycle for EA's).

The list below indicates NC=non-core EA credit, C=core EA credit and *=professional development credit.

Spring Meeting Dallas, Texas, May 30-June 1

Wednesday, May 30

8 PD	Late-Breaking Developments Part 1: Legislative Regulations*	45 C
9PD	Changing Patterns of Retirement Seminar: The Impact of Economic Conditions on Retirement*	45 NC
10IF	The Future of Mortality*	90 C
13TS	Introduction to Derivatives	90 C
23PD	A Different Look at Social Security Systems*	90 NC
27PD	Late-Breaking Developments Part 2: Court Cases*	45 C
28PD	Changing Patterns of Retirement Seminar: Phased and Partial Retirement*	45 NC
33TS	Employee Benefits Accounting*	90 NC
37PD	Does an ERISA Bias Lead to Equity Investment?*	90 NC
40PD	Trends in Corporate Post-Retirement Medical Plan Designs*	90 NC
42PD	Changing Patterns of Retirement Seminar: The Deferred Retirement Option Program (DROP) *	90 NC
44D	Social Security: The Long-Term Perspective*	90 NC

Thursday, May 31

62BG	Ethical Dilemmas for Pension Actuaries	90 C
67OF	Cash Balance Pension Plans Symposium Part 1: Intro and Actuarial Concerns*	90 C
77PD	Sources of Information and Technology Issues	90 NC
78PD	Asset Valuation Methods Effect on Volatility*	90 C
83PD	Cash Balance Pension Plans Symposium Part 2: Risks and Comparisons*	90 NC
92PD	Mortality Assumptions for Retirement Plans*	90 C
93PD	Pension Plan Adminstration*	90 NC

(continued on page 24)

Continuing Education Update

continued from page 23

98OF	Cash Balance Pension Plans Symposium Part 3: Alternative Designs*	90 NC
104OF	Cash Balance Pension Plans Symposium Part 4: Wrap Up and Current Developments *	45 C 45 NC

Friday, June 1

117PD	Employee Communications of Difficult Concepts*	90 NC
120IF	Standards - What Standards?	90 C
128PD	Funding Retiree Medical Plans*	90 NC
130BG	Estimation Techniques for the Pension Actuary*	90 C

Seminars

February 13	Employee Benefits Update for 2001 Teleconference	90 C
February 26-27	Investment Boot Camp for Pension Actuaries	75 C/375NC
April 4-6	The 4th Annual Annuity Conference, New Orleans, LA	165 NC
May 30	Changing Patterns of Retirement Seminar (Embedded within the Dallas Spring Meeting)	270 NC
May 31	Cash Balance Plans Symposium (Embedded within the Dallas Spring Meeting)	135C/225NC
September/ October	Experience Analysis Seminar	TBA
October	Retirement Implications of Demographic and Family Change	TBA
November	Teleconference Topic	TBA

On-Line Courses

Hybrid Plans	150 C/NC
Art of Expert Witness	TBA
Recent Trends in Retirement Benefits Design	90 NC

EA Questionnaires and Tapes

(Please review the Web site under EA questionnaires for complete listing from the 1999, 2000, and 2001 spring and annual meeting sessions)

Round Tables

In November and December of this year, the SOA will make audio tapes available for groups of actuaries needing 1, 2, or 3 hours of EA credit. More detailed information will be available later in the year, but we will put groups of members together to listen to 90-minute tapes and discuss them for credit in areas throughout the country.