The Actuary

The Newsletter of the Society of Actuaries

VOL. 15, No. 10 DECEMBER, 1981

NEW RISK THEORY STUDY NOTE SIGNALS CHANGE

by Alastair G. Longley-Cook

In a new contingencies textbook being written by five distinguished actuaries, there are five chapters dealing almost exclusively with Risk Theory. As these chapters are self-contained, the E & E Committee is circulating these to May 1982 Part 5 students as a study note. Others interested may order them by sending $6.00 to the Society Office.

Introduction of this new material marks something of a milestone in our profession's progress. Until now Risk Theory has been treated as a separate subject, useful perhaps for pricing reinsurance, but not part of the mainstream of actuarial work. The new textbook firmly embraces the study of variations from expected values as being at the heart of actuarial science; consideration of deviations in experience, traditionally the domain of Risk Theory, has become an integral part of the study of contingencies.

The E & E Committee realizes that initially such a fundamental change will not be unanimously applauded. Some may find the terminology and concepts unfamiliar; others may consider this approach academic, "not useful to the practicing actuary." Hence the Committee is trying to introduce this new approach in a way that will emphasize its true usefulness. A carefully chosen group of fourteen practicing actuaries has worked with the textbook authors to ensure that the material will be readily assimilated by actuaries not closely connected to the academic world, and that mathematical sophistication no greater than presently covered on Parts 1 and 2 is required.

(Continued on page 2)

SPECIFICATIONS FOR 1980 CSO MONETARY VALUES

Recognizing that actuaries' prevailing need is for programming aid rather than for volumes of derived values, the Society has formed a committee to design specifications on the 1980 CSO Tables and *has no plans to publish the traditional books.*

Specifications visualized include: monetary values, reserves and cash values, interpolated select mortality factors, age last birthday and joint life functions.

Suggestions are welcome. Please send them by phone or letter to Godfrey Perrott, Chairman at his Year Book location.

HELP NEEDED WITH ONE OF THE SOCIETY'S FINEST PROJECTS

We believe that some actuaries who have neglected reading their mail will welcome a reminder on behalf of the Minority Recruiting Program.

276 U.S.A. employers of six or more actuaries were solicited by letter for a contribution of $20 per actuary on their staff. 83 replied, sending $31,415.

6,000 individual Society members were solicited through an editorial in the September issue of this newsletter. 4 replied, sending $65.

The consequence is that the response thus far is below last year, and below what the task requires.

Those who care to do something about this, please make your check payable to "SOA/CAS Minority Recruiting Program" and send it to the Society (or Casualty Society) office. Contributions are tax-deductible in the U.S.A.

E.J.M.

UNIVERSAL LIFE IN THE U.K.?

by Seamus Creedon

We who have watched from a distance the development of Universal Life perceive two key influences:

i. the need to make the form of life assurance contract more responsive to the client's changing circumstances and to volatile economic environment;

ii. pressure of competition from a wide range of savings and investment media.

These influences have also been at work in the United Kingdom, although in a different regulatory and fiscal climate.

The key elements of Universal Life design—transparent investment returns, flexible premium and benefit structure and generally lower expense loadings—are increasingly found in United Kingdom new products. Most notably, unit-linked policy types (under which policy benefits directly reflect the performance of a segregated account) have steadily increased their share of industry sales. Some recurring single premium life products and most individual pension plans are very similar to Universal Life in their structures.

An important difference here is that policyholders are allowed a partial tax deduction in respect of individual life premiums. This deduction is subject to constraints on product design—policies must be for level annual premiums and for a minimum term—which have inhibited development of Universal Life as you have it. And this favourable tax treatment may have given our industry a built-in advantage over other savings media and thus avoided pressure on expense loadings.

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The Actuary

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The Society is not responsible for statements made or opinions expressed herein. All contributions are subject to editing.

AN EDITORIAL BY THE PRESIDENT

WHERE ARE THE ISSUES OF YESTERYEARS?

As the fifteenth incoming President to have the privilege of contributing an editorial, I have sought to avoid the embarassment of inadvertent repetition by re-reading those of my predecessors from Miller to Leckie. Not surprisingly, each of those messages continues to be apposite today.

In 1967, Morton D. Miller pointed to our need for communication and to the role of this newsletter, then in its first year. That present need is at least as great; happily, *The Actuary* continues to perform its significant function.

Member involvement in Society affairs has been the voiced concern of three presidents—Milliman (1968), Lancaster (1970) and Leckie (1980). I echo them in appealing to members to volunteer for committee service, to submit papers, and to participate in discussions at our meetings and our seminars.

The actuary's role has been discussed from various viewpoints by Moorhead (1969), Myers (1971), Lew (1973), Bragg (1975), Halvorson (1977) and Barnhart (1978). Their observations remain pertinent as we enter 1982.

Bowles (1972) focussed on problems we face in dealing with the world beyond our professional boundaries. We still must be aware of how the public sees us.

Public expression of opinion by the Society and its committees was Trowbridge's theme (1974). His remarks bring to mind subsequent controversy on just what constitutes an opinion rather than a statement of fact.

Reorganization of our profession in North America was the topic chosen by Jackson (1976). The present generation looks upon reorganization as dead, or perhaps just dormant; in its stead, cooperation and coordination among the actuarial organizations become steadily stronger, specially through the Council of Presidents and various joint committees. And recognition of actuaries, stressed by Vogel (1979), surely is still basic to our profession and the Society.

So, with reorganization as the one possible exception, the subjects of fourteen years of presidential editorials are front-rank questions still. We may expect to hear more about them all in the busy year now starting.

Robert H. Hoskins

Joint Paper Wins Halmstad Prize

James C. Hickman, F.S.A. and Robert B. Miller, Ph.D. have been awarded the second David Garrick Halmstad prize for their 1979 paper, *Bayesian Bivariate Graduation and Forecasting.* Both are Professors of Business and Statistics at University of Wisconsin—Madison. The presentations were made at our Atlanta meeting in October by John A. Mereu on behalf of the awards committee.

The prize-winning paper was published in ARCH 1979.3, p.99. A revised version is to appear in the Scandinavian Actuarial Journal (1981).

The history and sponsorship of this award, and the procedure for nominating candidates for the best paper on actuarial research published in 1980, are set forth on page 1 of this newsletter's May 1980 issue.

We join in extending hearty congratulations to Profs. Hickman and Miller whose names are now added to that of Prof. Phelim P. Boyle, winner for 1978. □

New Risk Theory

(Continued from page 1)

Although historically treated in a deterministic, i.e., single-valued, way, mortality rates, interest rates and the like are, of course, variables; we have been dealing with only their expected values. The recent volatility of interest rates has brought home to us that considering expected values is not good enough; disciplined analysis of variations has become critical to responsible management of our risk-taking enterprises.

Even if interest rates had remained stable, we would still find ourselves sorely in need of the tools this new textbook will give us. Examples of practical actuarial problems that require them include: calculating risk charges, choosing margins for adverse deviation in GAAP reserves, setting retention limits, deriving experience-rating formulas, establishing surplus requirements for a company or a line of business, and justifying pricing assumptions to regulatory authorities.

Unless actuaries can deal with these problems with authority, non-actuarial specialists will fill the void. Our leadership position is at stake. □

SEEKING EXPRESSIONS OF INTEREST IN FORMING SECTIONS ON REINSURANCE AND FUTURISM WITHIN THE SOCIETY

Two new Sections are up for consideration under the Society's provision for such units. To obtain permission to proceed, the respective organizers must show sufficiently widespread member interest. Any Society member may join.

To express your support, complete the enclosed card (DO IT NOW!), and mail it to the Society office in Chicago.

REINSURANCE

The undersigned believe that a Section for those concerned with reinsurance, whether life or health, group or individual, *ceded or assumed,* will benefit practicing actuaries, regulators, the industry and the public.

Section activities would embrace meetings and seminars, education and literature, research, and other services to actuaries in the reinsurance field.

Any of the following petitioners will welcome your questions at our Year Book phone numbers or addresses.

John M. Burleigh	Courtland C. Smith
John H. Harding	John E. Tiller, Jr.
Denis W. Loring	William K. Tyler
Jay A. Novik	Irwin T. Vanderhoof
Steve Radcliffe	John C. Wooddy
Paul E. Sarnoff	Melville J. Young

FUTURISM

Even amid economic, social and competitive ferment, actuaries must make judgments reflecting a view of the future. This Section aims to help us to do so.

Section activities would embrace meetings and seminars, education and literature, research and other services to actuaries desiring to study the future.

Any of the following petitioners will welcome your questions at our Year Book phone numbers or addresses.

Donald R. Anderson	John S. Pearson
Roy R. Anderson	Anna M. Rappaport
A. Anthony Autin, Jr.	A. Haeworth Robertson
David N. Ball	Maria Thompson
James L. Bergin	Robert D. Shapiro
Charles F. Colver	Jeanne M. Stamant
D. Bruce Dixon	Kihong Sung
Louis G. Gosselin	Kenneth P. Veit
Wilfred A. Kraegel	David S. Williams

REQUESTS FROM OUR DIRECTOR OF RESEARCH

To Members Interested In Research:

(1) I am embarking upon long-range plans for future experience studies, beyond those you've been accustomed to finding in the Reports Numbers of the *Transactions.* This is an appeal to you for suggestions on the kinds of experience studies you'd like to have undertaken.

(2) There's a need to accumulate particulars of experience studies that are relevant to our work but have been performed by individuals or other organizations and thus have not appeared in our literature. For example, we've been asked about mortality on quadraplegics—we found such a study—and on recovered burn victims. Please direct my attention, now and in the future, to any of these you run across.

(3) Do the studies that now appear in Reports Numbers meet your needs? Are you content with their frequency? Would different breakdowns of the data be useful? Please let me know.

(4) Finally, please tell me about yourselves. Would you like to serve on any of the experience study or other Society research committees? (If so, I will pass the word along to the Committee chairman who makes these appointments). What is your area of expertise? Are you able to submit any data to these?

James L. Cowen
Society Office, Chicago

NON-ROUTINE BUSINESS OF BOARD OF GOVERNORS, OCTOBER 1981

by Kenneth T. Clark, Secretary

(1) The Board approved the Report of the Task Force on Guides to Professional Conduct and authorized committees to implement it: viz., (i) a Standing Committee on Guides to Professional Conduct empowered to give advice requested by members and to draft concise guides modelled on those in the Report; and (ii) a task force to develop guidelines for the Committee on Complaints and Discipline.

(2) The Board approved guidelines for public expression of opinion by Society committees.

(3) The Board approved by-laws for the Society's first Section, on Health Insurance, adopted model by-laws for future Sections, approved petitions to form Sections on Reinsurance and Futurism subject to proof of sufficient support, and decided how Section finances should be handled.

(4) The Board adopted a new policy on reimbursing expenses incurred by members on Society work — a mild broadening of present policy.

(5) The Board authorized a committee to draft specifications for 1980 CSO monetary values.

(6) The Board authorized appointment of a Committee on Planning, to develop a Society statement of purpose, to review existing statements and the Society's strengths and weaknesses and the issues confronting us. □

THE NEW MODEL VALUATION AND NONFORFEITURE LAWS

by John O. Montgomery

(Continued from November issue)

Mortality Assumptions

The 1980 CSO Mortality Tables, sex-distinct for the first time, are specified initially—i.e., until the NAIC exercises its new authority to promulgate yet more modern assumptions. These tables follow the underlying experience more closely than did the 1958 CSO, thus retaining the observed mortality dip for men in their early twenties and the nearly flat rates for women at these ages.

Construction particulars are in the report of the Special Society Committee (Charles A. Ormsby, Chmn.) distributed to Society members in July 1979 and discussed in the *Record*, Vol. 5, No. 4 (1979), pp. 1301-1335. The Committee's full report, including a later addendum, is available as a Part 10 Study Note coded 10LB-507-81. A brief description was in the April 1980 issue of this newsletter, at which time the tables bore the names K(M) and K(F).

It continues to be important for actuaries to stress to the uninformed that CSO mortality rates are not experience rates. The few figures in the table below show the signficance of this distinction.

The rapid mortality improvement since the period of the underlying experience (1970-75) has prompted the NAIC Technical Task Force to ask the Special Committee to develop tables of ten-year select factors for optional use in calculating reserves and nonforfeiture values. Use of these optional factors produces lower net premiums but higher terminal reserves. These factors, not heretofore published though widely distributed, are given in a table on page five. Their use is permitted for all plans; they probably will be found most helpful in easing deficiency reserve requirements for term insurance.

Maximum Valuation Interest Rate

The maximum valuation interest rate under the new law (a) will differ in major degree by type of policy being valued, particularly in respect of the length of the period over which guarantees are given to the policyholder or subsequent beneficiary, and (b) will automatically change, for new issues, depending upon trends in a "reference interest rate" (R), that measures yields recently prevailing on seasoned corporate bonds.

To obtain the value of R, which will be announced annually by the NAIC, one looks into Moody's Investors Service for their Corporate Bond Yield Average. R will be whichever is the smaller, as of each June 30th, of those published averages for the immediately preceding 36 months and 12 months. For example, for 1982 R will be whichever is smaller of those two Moody averages for July 1978—June 1981 and July 1980—June 1981.

In this article we will describe only the interest rate formula that applies to whole life and other traditional forms that provide implicit level interest guarantees extending over at least 20 years. (Formulas for other types will be given in the third article next month.) The formula comes in two parts depending upon whether the value of R is not greater than 9%, or is greater than 9%.

If R is not greater than .09,
then $I = .35R + .0195$

If R is greater than .09,
$I = .175R + .03525$

The result of this calculation is to be rounded to the nearest quarter of one percent. But no change is to be made in the maximum interest rate unless the change from the then applicable rate would be at least one-half of a percentage point.

Applying this pair of formulas to various hypothetical values of R produces these results:

Moody's Average (R)			
3%	6%	9%	12%
Valuation Rate (I) (after rounding)			
3%	4%	5%	5.5%

The base year for this calculation (regardless of when the legislation happens to be enacted in any state) is 1980. The immediate effect of all this is that the maximum valuation interest rate on traditional policy forms (4½% under the old law) will be 5½% for 1982. On other life insurance forms that extend guarantees for 10 years or less the valuation interest rate for 1982 will be 6¾%. It runs substantially higher for single premium annuities and so-called guaranteed interest contracts.

Maximum Nonforfeiture Interest Rate

The maximum nonforfeiture interest rate under the new law for a policy to be issued in a particular calendar year is equal to 125% of its corresponding valuation interest rate, rounded to the nearest quarter of one percent. The immediate effect of this is that the maximum interest rate at which nonforfeiture values may be calculated on the aforementioned traditional policy forms (4½% under the old law) will be 7% in 1982.

Ed. Note: Next article by Mr. Montgomery will give more on interest rates and will discuss adjusted premiums and some transitional problems. □

Mortality Rates per 1000

MALES				FEMALES		
(1) *Underlying Experience*	(2) 1980 *CSO*	(3) *Percent* (2) *is of* (1)	(4) AGE	(5) *Underlying Experience*	(6) 1980 *CSO*	(7) *Percent* (6) *is of* (5)
1.28	1.90	148%	20	.48	1.05	219%
1.91	3.02	158	40	1.44	2.42	168
13.20	16.08	122	60	7.11	9.47	133
87.28	98.84	113	80	56.56	65.99	117

10-Year Selection Factors Permitted In Determining Life Insurance Reserves and Nonforfeiture Values

MALES	Policy Year									
Issue Ages	1	2	3	4	5	6	7	8	9	10
Under 20	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
20-39	75	80	85	90	90	95	95	95	95	95
40-44	70	75	80	85	85	90	95	95	95	95
45-49	65	70	75	80	80	85	90	90	90	90
50-54	61	65	70	75	75	80	85	85	85	85
55-59	56	60	65	70	70	75	80	80	80	80
60-64	52	56	60	65	65	70	75	75	75	75
65 & over	48	52	55	60	60	65	70	70	70	70
FEMALES										
Under 20	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
20-39	96	96	96	100	100	100	100	100	100	100
30-34	92	92	96	96	96	100	100	100	100	100
35-39	88	88	92	96	96	96	96	100	100	100
40-44	84	84	88	92	92	92	92	95	95	95
45-49	80	80	84	88	88	88	88	90	90	90
50-54	76	76	80	84	84	84	84	85	85	85
55-59	72	72	76	80	80	80	80	80	80	80
60-64	68	68	72	76	76	76	80	80	80	80
65-69	64	64	68	72	72	72	75	75	80	80
70 & over	60	60	64	68	68	72	75	75	80	80

CANADA'S NATIONAL PENSION CONFERENCE

by J. Bruce MacDonald

Ed. Note: The first part of this article was in our September issue.

On Coverage, the delegates agreed that government should be responsible for a basic floor, but the level of that floor was hardly discussed. It was also agreed that increases in government programmes offer the only way to help the current elderly poor; this problem is perceived as becoming less serious since full CPP benefits have become payable and the private sector's coverage continues to increase.

The consensus was that CPP benefits should continue to be a function of 100% of the average industrial wage, though some talked of raising this to 150%; whether the replacement percentage from government alone should remain at 25% or be at least doubled was briskly but inconclusively debated. It was agreed that the number who won't get pensions from private plans is too large, yet charges that the private system has failed were refuted.

Women. Many of the elderly Canadians living in poverty are women, so their plight was discussed under both Coverage and Women. The solution was a combination of benefit increases and broader use of survivor benefits. While it seemed to be agreed that women who leave the labour force to raise children should somehow be covered, there was no agreement on how to do this. There was strong support for putting QPP's child-raising drop-out provision into the CPP, and for making homemaker participation in CPP more than just voluntary. It was felt that private plans should provide benefits for part-time workers, many of whom are women. And there were heated and inconclusive discussions on unisex mortality.

Many women want pensions in their own right, not just as dependents. Some think the answer lies in reform of the social system, from which pension changes will flow automatically.

Vesting, Portability and Locking-In were not particularly contentious subjects. It is almost universally accepted that pensions are deferred wages, the premise from which the principle of immediate vesting follows, and from this the concept of immediate locking in of all employee contributions. It was also accepted that the value of any vested pension should come in substantial part—say, 50% — from employer contributions. A pension provided mainly by employee contributions isn't acceptable.

Inflation. Vested pensions must, it was thought, be protected from inflation, which can be done by leaving them in the original plan with some form of indexing. But many employers object to doing this, and most delegates doubted that either this or a system of reciprocal transfer agreements would work. The preferred solution is to transfer both employer and employee money into a locked-in Registered Retirement Savings Plan; the machinery for doing this is in place, and current high interest rates give some protection against inflation.

Industry questions the need for full indexing of all pensions inasmuch as government plans are so indexed; labour, specially the public sector unions, wants universal indexing. Excess interest indexing, i.e., using excess investment earnings to increase current pensions, was much discussed; for this to be helpful, pension costs may have to be calculated at a lower interest rate than currently, with concomitant increase in costs. It is recognized that all such changes will increase costs, but to an unspecified extent. Some doubt that the private sector can solve these problems, or even that it is interested in doing so. □

INDIVIDUAL PRODUCT INNOVATION IN CANADA

by Robert L. Brown

The Canadian Institute of Actuaries held a panel discussion on product innovation at its June 1981 meeting. This article consists of edited excerpts from a document that was distributed in advance to stimulate discussion, and some remarks on the discussion that took place. All these descriptions and comments are my responsibility.

From The Advance Descriptions and Critique

Among new products, developed mostly in response to high and volatile interest rates, are the following:

Flexible Premium Policies. These can be used to purchase either insurance or annuities. Most commonly they offer a five-year guarantee, although deposits in some of today's annuity products earn interest at rates that vary daily. After the guaranteed period, the premium is recalculated using new interest, mortality and expense factors, subject perhaps to a ceiling premium. Most companies guarantee non-forfeiture values; all are believed to guarantee the death benefit. Thus, this non-par product is like a participating policy whose dividends remain constant during the guaranteed period and are based on new-money rates.

Adjustable Single Premium Policies. Here it's the face amount rather than the premium that changes with the vagaries of interest, mortality and expense. Because it's a single premium product, the effects of new-money rates are magnified; much of the initial appeal is that a policyholder can replace his old policy and enjoy more coverage. Neither the cash value nor death benefit is guaranteed, except that some companies put a floor under the death benefit.

Discounted Premium Contract Life Insurance. The guaranteed premium is calculated at a conservative interest rate. The death benefit is fixed. Each premium, including the first, is discounted according to the then yield on Government of Canada Bonds. Although nominally non-par, this is like a participating policy, but the insured can see that he is getting full credit for new-money rates from the outset. The size of the cash value is not guaranteed, except at age 65; it depends on the market value of long-term bonds at time of surrender.

Critique In Advance Document: When interest rates are rising, consumers want the advantage of new-money rates. Life companies seek to satisfy this with products that turn much of the investment risk, sometimes also the mortality and expense risk, over to the policyholder— a sharp change from the modest risk-sharing of the past.

Although today's buyer is more sophisticated (and demanding) than before, one doubts that he is enough so to comprehend the implications of the shrinking of guarantees. If interest rates fall, isn't it conceivable that those who insisted on new-money rates will be the first to complain when their premiums rise or death benefits fall? As to cash values, one fears criticisms reminiscent of the Armstrong Investigation, leading to legislated non-forfeiture minimums such as those in the United States.

Consumers have come to look upon insurance at an affordable price as a

(Continued on page 7)

SOCIETY FINANCES — IN BLACK FOR 1980-81

by Robert J. Johansen, Treasurer

Income and Expenses
(rounded to thousands of dollars)

	Year ending July 31		
	1979	1980	1981
Income			
Membership Dues	$ 515M	665M	801M
Meeting Registration Fees	185	370	450
Examination Fees & Material	569	682	830
Sale of Publications	82	107	136
Income from Academy & Conference	58	75	79
Investment Income	42	79	134
Other Income	25	70	50
	1,476	2,048	2,480
Expenses			
Membership Activities	141	243	294
Meeting Expenses	174	271	285
Examinations & Materials	387	362	638*
Cost of Publications	30	42	51
Salaries	331	428	499
Other General & Administrative	575	649	684
	1,638	1,995	2,451
Excess, Income over Expenses	−162	53	29
Membership Equity, end of year	425M	478M	506M

* Not comparable with prior year; see Note G, *TSA XXXII* (1980), 657.

The $29,000 gain for 1980-81 amounted to only $4 per member, while the membership equity per member fell from $68 at July 1980 to $66 at July 1981. The helpful increase in investment income arose largely from use of a "locked box" for receipts of dues and fees and from investing transient funds in a high-yield short term fund.

Outlook For 1981-82

Our 1981-82 budget, totalling about $3 million, will reflect increased activity on behalf of our members, the effects of inflation, and heavy emphasis on cost control. A "profit center" approach is being used to analyze and control our income and outgo; such activities as meetings and seminars are intended to be self-supporting.

Even though dues for 1982 will be increased by $10 and $15, and examination and seminar fees also will be increased, the 1981-82 budget will be very close to break-even. □

Canada Product Innovation

(*Continued from page 6*)

social right. By transferring so much risk to the policyholder, do we increase the danger of government interference? This question must be faced by all actuaries and all companies, not just those who have introduced these modern products. For if the consumer complains, and the government listens, it will be the entire industry that will suffer.

Discussion at the Meeting

There was a full and wide spectrum of opinion. At one extreme—the buyer wants an inexpensive product, and is willing to risk future premium increases or face amount decreases to get it. And he's willing to accept lower cash value. The old guarantees have had their day; if we don't respond, we'll lose even more savings dollars to other financial institutions. At the other extreme—the buyer doesn't know the risks he's assuming; his satisfaction will last only till costs turn adversely.

Most opinions were in-between, but perhaps closer to the first than to the second extreme. The annual premium flexible products seem quite accepted in Canada, but less so the single premium variety.Nor is thre universal acceptance of products devoid of cash value guarantees. □

Universal Life in U.K.?

(*Continued from page 1*)

It is quite possible that regulatory changes in both our countries may lead to convergence in product design. We know there is pressure on U.S. regulators to broaden the scope for unit-linking, and the U.K. industry is lobbying for relaxation of the constraints on product design.

Ed. Note: We welcome this account from a member in Great Britain. □

PART 5 CHANGES IN 1982

The E & E Committee has decided to continue offering Part 5A and Part 5B as separate examinations for the foreseeable future, rather than to combine them into one exam as originally scheduled for 1982. Thus, any credit that students have *for either Part* 5A *or* 5B will be retained indefinitely.

Two modifications are being made for Part 5 in 1982: (1) Part 5A will become a 4-hour exam, and (2) Risk Theory will be moved from Part 5B to 5A. Thus, Part 5A (4 hours) will cover Advanced Life Contingency Theory and Risk Theory; Part 5B (3 hours) will embrace Mathematics of Demography, Principles of Construction of Mortality and Other Tables, and Mathematics of Graduation.

Please see Alastair Longley-Cook's article, "New Risk Theory Study Note Signals Change," in this issue, for particulars of a new Risk Theory study note which is being circulated to Part 5 students and can be ordered by others who want it.

James J. Murphy,
Vice-General Chairman,
E & E Committee

Seminar On Actuarial Career Development

The University of Nebraska Actuarial Club cordially invites anyone interested to attend their Sixth Annual Educational Seminar at the City Campus Union in Lincoln on January 23, 1982, 8:45 a.m. to 1 p.m. The major career development subjects include Actuarial Recruiting and Student Development in Companies. Admission charge is $2.00. Enquire to Prof. Warren R. Luckner at his Year Book phone or address.

IT'S LOWRIE (NOT LAWRIE)!

The man who'll be glad to hear from readers who have ideas about the curriculum for Numerical Analysis and Graduation is Walter B. LOWRIE. We apologize to those who were sidetracked by our misspelling of Walter's name on page 4 of our November issue.

Prof. Lowrie is at University of Nebraska-Lincoln. See p. A-90 of Year Book. E.J.M.

LETTERS

Election Matters

Sir:

This letter is in strong support of Recommendation III (cutting back on Board renominations) of the Special Committee on Election Procedures (October issue). The Society cannot afford to become in-bred; we have many talented younger members on our committees who have earned places on the Board; and adequate continuity is amply assured by our constitutional provisions.

Here are the figures for the eighteen non-officer members of the current Board, divided between "repeaters" (those who have previously served in any capacity) and new blood:

Year Elected	*Term Expires*	*Repeaters*	*New Blood*
1979	1982	2	4
1980	1983	4	2
1981	1984	4	2
	Totals	10	8

Four of these ten repeaters are now in their *third* term; two are former Vice-Presidents.

Examination of the preceding six years shows how new this phenomenon is. Apart from 1978 (in which three of the six were repeaters) we elected at most a single repeater annually; in 1977 there were none. The reason, I believe, was that Committees on Elections before 1978 operated under unwritten guidelines that effectively forestalled multiple terms.

Mr. Jackson's committee report was given to the Board (and hence to the 1981 Committee on Elections) in time for this problem to be dealt with. Chairman E. Paul Barnhart tells me that his committee did not knowingly ignore Recommendation III; through communication failure they simply didn't "hear".

A remedial guideline needs to be promptly drafted and communicated to the membership. It should permit occasional exceptions, but only for good and clear reasons.

C. L. Trowbridge

(*Continued on page 8*)

Letters

(Continued from page 7)

Sir:

Mr. Jackson's Committee recommendation against publishing candidates' views is disappointing. The Society is a democratic institution. A well informed democracy makes more effective choices than one less so. I for one know less about the views of key candidates for Society office than about any other candidates I vote for in the course of a year. Doubtless many members would choose with more confidence if they could read a paragraph or two of each candidate's thoughts on current Society issues.

What, then, of the objection that electioneering and skillful use of a single emotional topic might lead to an unfortunate choice? Thomas Jefferson, not a Society member, has dealt with this question. Since the authorities of our individual officers are limited and their terms short, the Society can survive the occasional unfortunate choice; perhaps we have even done so already.

The Society appears to be in transition from a small elitist profession to a large democratic one. That its members feel committed to it will be critical, specially in such areas as developing more helpful principles of professional practice. Members will examine the election process, among other things, to decide whether the Society really responds to their needs and preferences.

Peter L. Hutchings

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Sir:

The report of the Special Committee to Review Election Procedures (October issue) lamentably failed to state the names of the committee members who must share the blame with me. They were: Preston C. Bassett, John T. Birkenshaw, Sheldon Brooks, Michael H. Gersie, Mary S. Riebold and Charles Lambert Trowbridge.

Robert T. Jackson

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". . . Yet His Honor and His Toil"

Sir:

Among the 16,000 entrants registered for the New York City Marathon, 44 listed their occupation as Actuary. I don't know how many are Society members; all I know is that at least two Society members (Steve P. Cooperstein and I) completed the 26 miles. Steve's time was 4 hrs., 8 mins. 22 secs. Mine was 4 hrs., 30 mins., 2 secs., but I regard mine as 2 mins. 53 secs. less because the Verrazano Bridge was so jammed that it took me this long just to reach the starting line.

As I reached the finish line — no. 11,458 to get there—Fred Lebow himself (president of the Road Runners Club) was in the middle of the track, the crowd was cheering, and over the public address system I heard, "This is the greatest reception this man has ever received." I held my head high, picked up my knees, and put a smile on my face, but it was all for Ingemar Johansson, the former heavyweight champion, one minute behind me.

There were 170 registered entrants in my age bracket (over 60), so I estimate that at least 90% of the 1,800 who finished behind me were younger than I. On the other hand, Johnny Kelley, at age 74, finished more than half an hour in front of me. Perhaps after another eleven years of diligent training and with the extra experience and maturity that go with them, I may run the course in his 3 hrs., 52 mins.

John H. Cook

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Syllabus Changes

Sir:

Ralph E. Edwards' criticism (November issue) of how Associateship syllabus changes have been handled appears to center on three issues:

(1) The E & E Committee allows too little lead time between proposing syllabus changes and implementing them.

(2) New topics are introduced suddenly rather than being evolved gradually.

(3) After introducing new topics we make too many separate adjustments to the course of reading.

On his first point, we believed we were responding to the complaint by the actuarial academic community that it wasn't being consulted about syllabus changes. It is only recently that these have been announced in advance; these particular proposals were widely publicized to our academic members before being put into final form. In fact, the original timetable was lengthened.

On Mr. Edwards' second point, the Committee believes that the introduction of new risk theory material into Part 5 serves as an example of evolutionary approach. We expect this initial exposure to lead to suggestions for further improvement before it emerges in textbook form; subsequent fine tuning no doubt will be made as a result.

We have to balance Mr. Edwards' third criticism against what strikes us as a far more serious deficiency, i.e., leaving material on the syllabus long after it has ceased to be practical.

These criticisms are welcomed. We hope to be seen as trying to keep the syllabus relevant within constraints of stability and continuity.

Michael J. Cowell, General Chairman
E & E Committee

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Cash Value Levels

Sir:

R. Fred Richardson, urging less regulation (October issue), seems to feel that guaranteed cash values are the villain, but how does one explain why so many U.S. companies promise cash values far greater than the allegedly onerous laws require? Many of today's problems arise because cash values are so inordinately high that companies don't wish to put up the appropriate reserves for them. Also because we forget that lapse assumptions are quite fictitious and that cash values are funds withdrawable on demand and must be so treated.

Warnings that companies must remain liquid exist back to 1930, but even in 1981 after a bond market collapse some companies still invest long. The problem isn't an over-demanding code, but lack of recognition of the nature of cash values.

De-regulation, like motherhood and apple pie, we all seem to favor, yet regulations multiply in number and erudition; their growth is a marvel to behold. But where to start dismantling the apparatus is no easy matter. Complaints about the system seem to evaporate when exposed to light of day.

John T. Gilchrist