SOCIETY OF ACTUARIES

Article From:

The Actuary

April 1983 – Volume No. 17, Issue No. 4

The Actuary

The Newsletter of the Society of Actuaries

VOL. 17, No. 4 APRIL, 1983

MATH EXAM PRIZEWINNERS

(This is the second of two articles.)

The tabulation in our March issue summarized the experience from among 233 prizewinners of the 24-year period 1947-70. Forty-two of them became Fellows.

In this article we examine these same 233 people in terms of the academic institutions from which they wrote the prizewinning examinations.

We look at each college from what may be regarded as a purely selfish professional viewpoint, i.e., in terms of how many of the 42 Fellows came therefrom. The figure shown parenthetically after the institution's name gives the number of its prizewinners out of which the Fellows emerged.

Colleges That Gave Us 4 Fellows
Yale (10); Toronto (29)

Colleges That Gave Us 3 Fellows
Drake (3), i.e., a perfect record; Michigan (5); Harvard (42).

Colleges That Gave Us 2 Fellows
Dartmouth (2), perfect; Iowa State (2), perfect; M.I.T. (20).

Colleges That Gave Us One Fellow

Alabama (1)	Minnesota (2)
British Columbia (1)	C.C.N.Y. (3)
Carnegie Tech (1)	Columbia (3)
George Washington (1)	Rutgers (3)
Iowa (1)	Trinity (3)
Purdue (1)	Manitoba (4)
Victoria (1)	McGill (4)
Brooklyn (2)	Queen's (4)
Chicago (2)	Brown (8)
Haverford (2)	

Thus, the 42 Fellows were yielded by the above-listed 27 institutions. For what it may be worth, the colleges that yielded these positive results produced 160 prizewinners, giving a ratio of 26 percent. Thirty-four other institutions produced, among them, 73 prizewinners but, so far, no Fellows. E. & O.E.

E.J.M.

INSURING AN END TO WHAT?

by Daphne D. Bartlett

"Insuring an End to the Actuarial Rip-Off of Women" headlined an article by syndicated columnist Ellen Goodman in the March 3rd *Los Angeles Times*. It was about Risk Classification, one of the most important issues ever to confront our profession. Pricing of risks is, after all, among the actuary's major responsibilities.

Such well-intentioned arguments in favor of unisex pricing for individual contracts can just as easily be applied to age or to state of health. Are we actuaries ripping off women, old people, sick people? I think not, and I'm concerned by the harm that articles such as Ms. Goodman's do.

If there are alternatives to unisex pricing that would meet the social concerns while preserving the actuary's ability to price according to the cost of the risk, actuaries are the ones to find them. Readers, I urge you to get involved, and to make your considered views known in the press and in the legislative arena.

Who else is going to see that these questions get balanced treatment? ☐

UNFAIR GAMBLING PRACTICES ACT OF 1983

Ed. Note: We are indebted to Allan Hale Johnson for bringing this otherwise unidentified document to our attention.

It has come to our notice that unfair practices have been taking place in betting on horse races. We find that our race tracks are paying returns *that depend on which horse wins!*

Consider the results from last Tuesday's 9th race at Old Mud Swamp Race Course, illustrating the deceptive practices perpetrated at this track, and indeed in the entire racing industry:

(Continued on page 2)

STEPS IN CREATING STUDY NOTES

by Sam Gutterman, Education Committee Chairman

Step 1: Author

Once need for a new or revised study note has been identified—perhaps by the Education Committee, Director of Education, or a Task Force—one or more qualified and willing authors must be found. The author, usually an FSA, normally is an expert in the area. Nominations may come from the Education Consultant, from discussions with other experts, or from the Society's volunteer list that was solicited a year ago.

Step 2: Review Group

The size of the review group, maybe six or more, depends on the effort's scope. Leading candidates are the topic's Education Consultant, representatives of the Part Committee, the Education Coordinator, the Education Vice-Chairman, and someone named by the Canadian Institute of Actuaries. Other selected authorities and Society or Academy committees close to the subject may also read the study note

Step 3. Education Committee

After the reviewers' recommendations have been dealt with, the note comes to the Education Committee for acceptance, rejection, or referral back to the drawing board. ☐

SOCIETY OFFICE MOVING SOON

After May 15th, our headquarters address will be:

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Details accompany this issue.

The Actuary

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Published monthly (except July and August) by the SOCIETY OF ACTUARIES, 208 S. LaSalle St., Chicago, Illinois, 60604, Barbara J. Lautzenheiser, President, Kenneth T. Clark, Secretary, Robert J. Johansen, Treasurer, Edward J. Porto, Director of Publications. Non-member subscriptions: students, $4.50; *others,* $5.50.

The Society is not responsibe for statements made or opinions expressed herein. All contributions are subject to editing. Submissions must be signed.

EDITORIAL

WHAT WERE THEY LIKE ?

The unavoidable coldness of the listing of our profession's earliest practitioners (this issue, pages 4 & 5) needs to be thawed by some attempt, inadequate though it must be, to convey what kind of people our forebears were.

One major characteristic is that, unlike most of us, many brought with them the stamp of previous business or professional experience they had had before becoming actuaries.

Of course they had to be self-reliant. As Ray D. Murphy, the Society's 1939 President, remarked: "The actuary of 1889 and earlier was left entirely to his own devices, with the aid of publications of predominantly British origin, to obtain the fundamentals of the profession".

Surprisingly to this observer, few came from other lands. The only ones in our list identifiable as born elsewhere are: Hugh C. Baker (Ireland), John F. Entz (Switzerland), Charles Gill (England), Robert Patterson (Ireland), Alexander G. Ramsay (Scotland), Harvey G. P. Tuckett (England). Mr. Tuckett came to the U.S.A. in a hurry after engaging in a duel with the Earl of Cardigan (later to lead the disastrous charge of the light brigade at Balaklava).

Happily, available to us in *T.A.S.A.* 40 (1939) are some delightful personality sketches by Robert W. Huntington of several leading actuaries of the 19th century, from which come these fragments:

> "Affairs and men were not as highly standardized as they are at present. Many members of the Society had come into actuarial work because they happened to, and very picturesque individuals they were.
>
> (About Emory McClintock): (He was) a large impressive man wearing mustache and goatee, quite formal in his manner and appearance, earnest and kindly. . . . I always had the feeling that he had one trait in common with the late President Eliot of Harvard, who, when walking home from a meeting, remarked, 'That was a particularly good meeting—no humor'.
>
> (On Walter C. Wright): A son of Elizur Wright, he was one who did not let convenience or business advantage interfere with theory. The dividends of the New England Mutual used to be calculated by Mr. Wright on a formula of his own and paid each year in strict accordance with the formula, so that even if the difference in the total earnings from one year to another was only a few dollars, the dividend on every policy at every age had to be recalculated.
>
> (On William D. Whiting): (An observer) said that he had a wonderful brain but his breastbone was made out of marble. This, however, was not the fact; I think he got this impression because Mr. Whiting (an insurance department actuary) had been more strict than we were used to in his examination of the company."

Would that we had such sidelights on more of our pioneers.

E.J.M.

Unfair Gambling Practices Act

(*Continued from page* 1)

Horse	*Bets Placed*
Soon To Be Glue	$ 1
National Velvet	$ 70
My Friend Flicka	$ 29
Winners' Pool	$ 100

National Velvet won. The pool—admittedly a fine total, there being no deduction even for expenses—was distributed to the holders of tickets on that horse in the ratio of $100 to $70, i.e., $1.43 per $1 bet.

This is grossly unfair! There were three horses, so the winning ticket should have paid $3 per $1 bet. When we questioned the track management on this point, they fed us some theoretical argument that the pay-off is based on something called "odds". They said that if Soon To Be Glue had won, the only bettor would have been paid $100 on his $1 bet! What kind of a scam is going on here?

Management said that differences in racing ability—they called it "form"—caused more people to place bets on National Velvet than on Soon To Be Glue. Their argument was that if the pay-offs were to be identical per $1 for all horses, eventually all bets would be placed on the favorite; this would lead to a purse of only $1 per $1 bet, which would ruin the racing industry.

The industry is crying wolf. We agree that National Velvet is the swifter horse, and hence would beat Soon To Be Glue on an *average day*, but they fail to recognize that nobody can predict accurately what will happen until the race has been run. It is unfair to base the pay-off on past results which merely show that *on the average* fast horses beat slow horses.

And when you consider that more people bet on National Velvet than on Soon To Be Glue, this unfair treatment becomes socially unacceptable. 70% of the bettors were discriminated against! We can't let the theory of odds override important social issues that adversely affect 70% of the population. That National Velvet is a swift horse isn't the fault of those who bet on her—nor is it their fault that more people bet on her than on Soon To Be Glue.

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Unfair Gambling Practices Act

(Continued from page 2)

Furthermore, those who bet on My Friend Flicka, which came in second, were also discriminated against. The race was 1,000 lengths long. My Friend Flicka finished 50 lengths behind National Velvet, which means that My Friend Flicka completed 950 lengths in the same time that National Velvet completed 1,000 lengths, only a 5% difference. So it's grossly unfair that National Velvet returned $1.43 while My Friend Flicka returned nothing. Those who bet on My Friend Flicka should have received 95% of $1.43.

Here again, the industry started talking about "odds". They said that if My Friend Flicka had won, the pay-off would have been $100/$29, i.e., $3.45. But this is all wrong—the pay-off should have been at most 5% larger than on National Velvet because she's only 5% faster than My Friend Flicka.

I plan to introduce legislation to correct the industry's problems. My bill will require that the winner's purse per $1 bet not vary according to how many bets were placed on a particular horse, nor upon what the industry calls "form". This requirement won't apply to races already run for which purses have been distributed—but it will govern all future races, including those for which bets have already been placed.

The industry's objection to applying this legislation to future races for which bets have already been received is that this would be unfair to those who placed bets on long shots when the understanding of how winnings would be distributed was different. This is a smokescreen. The industry can solve this problem by paying out winnings equal to the greater of those under my system or the old system.

This practice of discriminating against swift horses must end !! □

Deaths

Bohdan M. Chesiuk, F.S.A. 1978
Michel Giasson, F.S.A. 1974
Frank W. Lackie, F.S.A. 1978
Lester H. Vetter, A.S.A. 1947
William H. Wetterstrand, A.S.A. 1976

AN ACTUARIAL QUIZ OF LONG AGO

by John C. Angle

The 7th Annual Report (1866) of the New York Superintendent of Insurance, available in the New York Public Library, includes the following story:

> "The Superintendent has recommended the passage of (an) act establishing the English Life Table No. III for males as the legal standard of expected mortality, and the assumed interest rate of five percent . . .
>
> "As preliminary to legislation . . . , the Superintendent addressed a Circular Letter to the Actuaries and Presidents of the Life Insurance Companies transacting business in this state, requesting their opinions as to the best Table of Mortality, and the proper rate of interest to be assumed in making valuations and other obligations of American Life Insurance Companies. . . ."

The Superintendent, William Barnes, had enclosed with his Circular Letter valuation information—age at issue, month and year of issue, face amount, plan—for each of 17 policies for $68,000 issued between 1833 and 1864. Numerous responses came in, including "a communication from Mr. John Paterson of Albany, an eminent Scholar and Mathematician" (possibly father of the John S. Paterson, born 1848, who became actuary of that same insurance department in 1883), but just six actuaries submitted valuations of those 17 policies, giving the following results:

Name & Title Given	*Basis Used*	*Calculated Reserve*
C. F. McCay, Augusta, Georgia	His own table, 4%	$ 9,723.51
Consulting Actuary of the Southern Mutual Life Insurance Company		
John F. Entz, New York	English Table 3, 5%	10,785.67
Consulting Actuary of the National Life Insurance Company of New York		
Hon. Elizur Wright	Actuaries, 4%	8,928.39
Consulting Actuary of the Knickerbocker Life Insurance Company of New York		
Sheppard Homans	English Table, 3, 5%	8,018.21
Actuary of the Mutual Life Insurance Company of New York		
D. P. Fackler	Actuaries, 5%	8,097.00
Actuary of the Brooklyn Life Insurance Company of Brooklyn		
Wm. J. Coffin	(i) English No. 2, 4%	8,808.03
	(ii) English No. 3, 5%	8,817.69
Actuary of the Home Life Insurance Company of Brooklyn		

Sheppard Homans, a quarter-century later to become the first President of the Actuarial Society of America, submitted the lowest valuation, but that by David P. Fackler (fated to succeed Mr. Homans) was only slightly higher. The conservatives proved to be the southerner, Charles F. McCay, and John F. Entz of New York. It is noteworthy that the lowest and highest valuations were arrived at from identical mortality and interest assumptions; Entz, though, loaded his single premiums by 33⅓% before deducting the present value of future valuation premiums, which were gross premiums less anticipated renewal expenses.

I enjoyed reading the clear and forceful writing of William Barnes (1824-1913), the influential first Superintendent of the New York Department. J. Owen Stalson seems correct in his verdict (*Marketing Life Insurance: Its History in America*, p. 346) on our "wonderful good fortune of having Wright and Barnes in office" during the formative years of life insurance. □

FALL EXAM STATISTICS

Part 1

	Passed	*C.R.E. Credit*	*Total*	*New Associates*	*New Fellows*
Nov. 1980	588	30	618	280	226
Nov. 1981	585	23	608	230	179
Nov. 1982	669	28	697	197	118

For May and November 1982 combined, the number of Part 1 Passers was 1,336. This means that the long downward trend reported by Linden N. Cole (June 1982 issue) has been at least interrupted, if not reversed.