

SOCIETY OF ACTUARIES

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EDITORIAL

In his address delivered at the Society's annual meeting in New Orleans, our outgoing President discussed at length changes in the Society's examination process. His successor, in a guest editorial appearing on this page in October, also referred to changes in the Society, including its examinations. Just for balance, the few words that follow are offered for providing a backward reflection on the same subject.

Were you to ask a young FSA if he or she is familiar with the old Part 1 exam, it is highly likely your subject would not know what you were talking about. If you direct that inquiry to a middle-aged FSA, the response would probably be something like, "Sure, I took the old language aptitude test...". Next, find a really mature Fellow (defined as one taking the preliminary examinations in the '30s) and try the question once more. Expect this answer: "You bet. Believe me, that really was an exam"!

Part 1 in the old days covered algebra; Part 2 had trigonometry, logarithms and plane geometry; Part 3 was on higher algebra and probability. Each was a three-hour examination with ten questions (often closer to 20, as many had two parts).

Part 1 in 1935 did, in fact, have a full 20 questions, including subparts. Here is an example:

3(b) Find the fifth root of 16,808 to ten places of decimals.

Part 2 of that 50-year-old examination included this one:

The town A is situated on the bank of a river which flows in a straight course from northeast to southwest. Across the river directly to the east and hidden by a mountain is town B. From B to the river there is a level railroad which goes $25^{\circ}17'$ west of north to the eastern bank of the river, and there it turns and crosses the river due west on a bridge, which is 1,652 feet long. From this point there is a straight road to the town A, which is 7.5 miles away. Find the distance in an airline from the town B to the town A and the length of the railroad track from B to the bridge.

given:	$\log 5.865 = 0.76827$	$\log 7.809 = 0.89260$
	$\log 5.866 = 0.76834$	$\log \sin 45^\circ = 9.84949-10$
	$\log 7.500 = 0.87506$	$\log \sin 64^{\circ}43' = 9.95627-10$
	$\log 7.808 = 0.89254$	$\log \sin 70^{\circ} 17' = 9.97376-10$

If the questions were not difficult, they seemed to be, especially so when the time limitation was taken into account. For the year in which the writer made the first of his three attempts at Part 1 (1939) there were 28 successes out of 483 hopefuls — that's right, less than 6%.

The point to be made is that the one constant in our Society's exam process is change. It has always been so, and will continue to be. And don't knock it. Were this not the case, our students would still be making calculations with the use of logarithms. Would they know how? S.A.R.

Death ·

F. Bruce Gerhard

FSA 1920

Editor's note: Just prior to his death, Mr. Gerhard was one of only three surviving members who had been Fellows of the Society for sixty-five years.

Society Secretary

(Continued from page 1)

techniques were begun. During the period soaring interest rates generated a peak in demand for policy loans far higher than companies had ever experienced. Companies not only survived the economic risks they had been facing at the beginning of the period but succeeded in changing their books of business to policies that were much better fitted to cope with similar risks in the future.

Moreover, the companies grew very substantially during the five year period. Assets increased from \$430 billion to \$725 billion; premium income rose from \$85 billion to \$135 billion: and sales of individual life insurance went from \$330 billion to \$820 billion. Once again serious opportunities came along with the serious problems.

The actuaries running consulting firms had to deal with major changes in product designs and services offered by their firms during this period. Changes in the economy and in federal laws and regulations had led to a cutback in the growth of defined benefit pension plans. Actuaries advising on the funding of such plans have been exposed to increasing pressures in several directions from their clients and from the government agencies involved. At the same time, defined contribution pension plans became more widely used and presented other types of pricing problems.

Consultants have also extended their activities into the design, pricing and administration of other forms of employee benefits and compensation plans — including cafeteria type plans Added to the pressures resulting from – providing changing services and working with changing products werr relatively frequent changes in the rules (Continued on page 6)