

THE EMPLOYMENT OF PROPERTY AND CASUALTY ACTUARIES

BY

L. H. LONGLEY-COOK

The shortage of mathematicians and the attractions of science and industry have combined for many years to limit severely the number of young men who can be persuaded to enter the actuarial profession and, as a result, there is a very real shortage of able qualified actuaries. In Property and Casualty insurance, the regulatory and competitive problems arising out of the McCarran act and the introduction of multiple line underwriting have led to a notable need for actuarial advice, and at the same time have subjected rate making to political and opportunist pressure. Unqualified persons are indeed finding it profitable to call themselves "actuary".

The 1958 Year Book of the Casualty Actuarial Society reveals that there are 186 Fellows of the Society but this figure gives a false impression of the number of qualified actuaries actually engaged in Property and Casualty insurance. The Year Book shows that at the end of 1957, after excluding Fellows of the Society of Actuaries, those employed by life insurance companies and those retired, 6 Fellows of the Casualty Actuarial Society were in state employment, 23 were employed by rating and advisory bureaus and 78 by Fire and Casualty insurance companies. A further 15 Fellows were consultants or were employed in industry, as investment counselors, and in other capacities.

Of the 6 actuaries in state employment, only 4 were on the staff of the Insurance Departments of the 48 states of the Union, which can hardly be said to provide a satisfactory staff for proper rate supervision. It may be noted that there were 6 qualified actuaries on the staff of Insurance Departments 8 years ago.

The 23 actuaries employed by rating and advisory bureaus compares with 13 similarly employed 8 years ago, but part of this increase is accounted for by the inclusion of 5 senior fire rating bureau officials who were elected Fellows of the Society as a result of the expansion of the examination syllabus in 1951 to include Property insurance. There is, however, little indication that the fire bureaus are encouraging their young employees to become members of the Society or are seeking qualified actuarial advice.

The analysis of the qualified actuaries employed by fire and casualty company groups is interesting:

<u>No. of qualified actuaries employed</u>	<u>No. of Company Groups</u>	
	<u>Dec. 1957</u>	<u>Dec. 1949</u>
10 or more	1	—
5 to 9	3	2
3 or 4	3	3
2	7	7
1	23	17

A total of 78 actuaries are employed in 37 companies compared with 55 actuaries in 29 companies 8 years ago.

Of course, all the actuaries employed by an insurance company are not necessarily engaged in actuarial work: some are executives, some are underwriters and some are employed in other non-actuarial capacities.

If we use as the criterion of a large insurance group, those groups whose premium writings for 1957 exceed \$100,000,000, there are 20 large stock groups, 5 mutuals and 1 exchange. The average number of actuaries per group are: stock just over 1½, mutuals 3½ and exchange 1.

The following analysis of the 20 large stock company groups is of interest:

<u>No. of actuaries per company</u>	<u>Mode of operation</u>	<u>Number of companies' groups</u>	<u>Operating Ratio 1957</u>
1 or less	Direct Writing	2	99.8
1 or less	Agency	13	105.0
2 or more	Agency	5	102.4
		20	

Anyone who deduces from the above figures that a stock agency company can reduce its operating ratio by a couple of points by employing two or more actuaries is no actuary, but the figures may indicate that the type of management which appreciates the value of actuarial advice was, on the average, the better operated company in 1957.

I trust that some of the information in this brief paper will be of assistance in the continuing problem of recruiting young actuaries. An additional statistic which may help in this cause is that, of the Fellows of the Casualty Actuarial Society employed by insurance companies, who have been qualified for at least 5 years, 45% have the rank of Vice President or equivalent.