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GENERAL

A. What new problems or solutions have developed in the field of agents' compensation? Is a continuing trend toward term policies and term riders seriously impairing agents' earnings?
B. What considerations have led some companies to recent reductions in individual annuity rates?
C. Are there dangers in the movement from no first year cash values to ever higher first year cash values? How are first year expenses allocated? What is the effect on lapse rates and how are lapse rates used in pertinent calculations?
D. Is there an increasing demand for the issuance of insurance at ages up to 70 or beyond? What needs are met by new insurance at these ages? What are the special underwriting problems?
E. Should the Society again give serious consideration to elective subjects in the Fellowship examinations? With the increasing number of specialized fields of activity, has the time come for a system of majors and minors similar to that used by many universities and by the LOMA? In what fields might such majors or minors lie?

MR. H. S. GARDNER, in discussing section A, stated that the most difficult agency compensation problem the New England Life has faced in recent years has been the development of a satisfactory program for financing new agents. This problem has been made acute because of the shortage of manpower and inflation coupled with the drain on personnel arising out of World War II and the Korean conflict. Their general agents can not afford to pay the allowances necessary to get the type of men they need, so the company had to participate to a substantial degree.

To keep the cost of such a program from becoming too expensive it is necessary to adopt efficient selection procedures and to eliminate the unsuccessful agent as soon as possible.

For admission to their program the New England Life requires that the agent be between the ages of 23 and 50 and have a high score on an aptitude index, a college background, adequate contacts and the recommendation of the general agent who is sharing the cost.

To continue in the program the agent must meet a cumulative production quota at the end of the first four months and at the end of each two months thereafter until the end of the three-year financing period. The production requirements are set so that there will be no reduction in income after the financing period. There is no indebtedness upon successful completion of the program.

Their current training allowance program went into effect in June 1955. So far 654 agents have participated; 19% were eliminated for failure to meet production requirements and 70% are still active. He stressed that the annual rate of failure would be much higher.

Mr. Gardner reported that in terms of production the plan has been quite successful. In 1956 the financed agent's average production was about one-third higher than that of the average full-time agent.

He also said that the cost was not as low as they would have liked and they modified certain requirements. They raised their selection standards and increased production quotas during the first eight contract months by 25% to 30%. Their experience indicates that the substantial producer gives evidence of his ability quite early in his career, hence the increased quota will cull out the unsuccessful agents sooner while not bothering the successful ones.

Mr. Gardner also brought up another problem regarding the leveling out and extending of terminal commissions payable after death or retirement. They have made available, to their general agents and large producing full-time agents, "Oates" type spread commission amendments. These provide a level income to the payee with any excess commissions credited to a fund. Income payments continue for 15 years or until prior exhaustion of the fund and any balance at the end of the 15 years is paid in one sum. To compute the income they use a system that is simple enough for the agent or general agent to figure for himself from data readily available. They also include an income recomputation provision under which, after all commissions have accrued, the amount in the fund is applied to purchase an annuity-certain to the end of the 15th year. This prevents stopping the income before 15 years or making the payment at the end too large.

MR. F. J. ONSTINE, in discussing the second part of section A, said that, based on an analysis of 13 large companies, for companies writing at least 30% term insurance there was an almost linear correlation between the percentage of nonterm new business and average first year compensation per dollar of first year premium. These results were somewhat surprising in that the higher the nonterm new business the lower the first year compensation per premium dollar. He thought this indicated that companies which favor term insurance do not penalize their agents for writing it.

Thus if a company's compensation scheme does not penalize the writing of term the question becomes, "What is the effect of writing term insurance on the total amount of first year premium?"

He felt that to make sales an agent often has to be able to bridge the gap between his prospect's insurance needs and what the prospect can afford or is willing to pay. Term insurance is such a bridge and the amount used depends often on how good the agent is. Thus if term insurance is used wisely it can increase an agent's income.

In regard to renewal compensation he pointed out that because of heavier terminations the compensation for term insurance tends to be less, but on the other hand most term insurance is convertible and full commissions are often paid on conversion.

MR. P. T. HARKNESS, JR., taking up section B, stated that the Connecticut Mutual revised their annuity rates to improve their competitive position and to reflect the higher investment yield and lower mortality rates. At the younger ages they increased the loadings to allow for a reduced yield upon reinvesting these funds at a later date.

Mr. Harkness reported that their current basis is the a–1949 Tables projected to 1969 up to age 85. For ages 90 and over they used the 1937 Standard Annuity Table modified one year for males and six years for females. Rates for the intervening years were interpolated. Their interest assumption was $3\frac{3}{8}\%$ throughout, and the loading was graded down to $6\frac{1}{2}\%$ of the gross for ages 65 and over.

One problem that arose was that at some ages their new rates were more favorable than their settlement options. Their solution to this was to make available special option rates at these ages, not guaranteed for the future and to be used for options currently exercised.

MR. T. H. DANCY said that the Manufacturers Life revised their annuity scale for essentially the same reasons as those already outlined by Mr. Harkness.

He reported that they use the a–1949 Tables with an age rating system based on Mr. Hoskins' approach which appears in Volume IV of the *Transactions*. They have a minimum rating down of one year at the higher ages to compensate for the effects of selection and deficiencies in the a–1949 Tables with Projection B.

He also mentioned that further reductions in their period-certain life annuities payable other than annually were made by using a more accurate method of computation.

MR. R. T. JACKSON, in opening the discussion of section C, said that it is possible to provide larger surrender values with a high minimum policy with no inequity to existing policyholders, and without disturbing the basis of the agency system, if the commissions are redistributed. The Phoenix Mutual has such a life policy with a \$25,000 minimum which is written on an annual premium basis only. The first commission is 25% followed by nine renewals at 10%. Furthermore, the first year dividend is contingent. Finally, a premium of 30 cents per thousand is charged to allow for the remaining cost of providing the higher cash values. He also mentioned that their managers are not paid on policies lapsing in the first four years.

The bases for their calculations were an interest rate close to their current net interest earned, 1946-49 select mortality, and their own company experience lapse rates which ran about 70% of Linton A. The resultant required additional premium varied by age, but they adopted a flat additional premium of 30 cents per thousand.

This policy was designed specifically for the split dollar market. He felt in practice such a policy will produce a lot more bank loan and policy loan business than split dollar business. Almost 80% of these policies are being written with an initial loan.

He cautioned that some of the uses of this plan are unsound and that a high lapse rate may result where the motive for purchase has been primarily an apparent tax advantage rather than a soundly conceived need for insurance. He also thought a depression could be costly to bank loan business.

MR. C. W. McMAHON recognized the hazards of high early cash values, but felt that if used with proper safeguards these plans are feasible.

The Union Central found that the demand for these policies came from agents specializing in insurance to fill business needs and special financing arrangements. Corporations buying key-man insurance want to carry such insurance on their books at as high an asset value as possible and the employer setting up the split dollar plan wants to level out the cost to his employees. He felt that this type of business should show better than average persistency under normal conditions.

They also use a 25% first commission followed by nine 10's. In addition to reducing first year expense this type of scale encourages agents to keep the policy in force.

He also pointed out that the potential losses due to higher early cash values decrease rapidly by duration, which limits the company's liability at any time to recently issued business. The excess of the special cash values over the normal scale of values may represent an extra benefit which is available on surrender. Since these special values eventually become the same as the normal values at the point where they would normally allow the full reserves, these extra benefits decrease by duration. Hence, at any particular time the company could discontinue the sale of this special policy and their potential future losses due to the extra cash value benefits would decrease each year.

The actual losses, of course, depend on the method used in allocating expenses. It may well be that the company is not any better off at the end of the seventh and eighth year than it would be at the end of the first year. They have never determined just exactly when they broke even on their policy. Their approach was to determine a charge in the dividend formula so that the present value at issue of the 20th year asset share on this plan would be comparable to that on their regular Ordinary Life Preferred Class policy with normal cash values. They used their regular Life and Endowment lapse rates in making these calculations. If these rates are found to be too optimistic, the charges in the dividend formula may have to be revised in order that their assumptions over the first twenty years may be realized.

One problem that can arise from these plans is that an agent, in order to qualify for conventions or contests, can purchase on his own life at a low cost, after credit is taken for his commission, insurance which will be dropped at the end of the first year. This can be minimized by limiting the amount of production on the agent's own life which can be used toward such qualification.

Also, he warned that if a company issues policies with guaranteed changes, care must be taken to see that no adverse selection can be made because of these high cash value plans.

He also noted that careful underwriting is necessary to prevent the policy from being used in place of low cost term insurance or for speculation and overinsurance.

MR. J. C. MAYNARD warned that it is possible for first year values to become large enough so that there will be an actual loss on surrender. This could be very important as there are uncertainties as to the future tax treatment of bank loan and split dollar plans. Individuals may shift to a different tax bracket. Loan interest rates fluctuate. Corporate profits can vary much from year to year. Management of corporations may change from time to time, and also the insured employee or executive may terminate his employment.

Mr. Maynard also questions whether adjusting a considered pattern of field compensation to suit a special form of sales presentation is desirable.

MR. T. H. DANCY, discussing section D, stated that the Manufacturers Life has written insurance on applicants at ages 70 and over for about four years. They have placed over $3\frac{1}{2}$ million in 160 policies in this period with about 75% standard by policies and 80% standard by amounts.

He believes the demand arises from a need to have liquid funds available to meet estate taxes or in business to cover stock purchase or partnership liabilities. He feels dependent elderly people are not good prospects for insurance and they generally are declined.

They underwrite these ages very carefully and secure full medical information, including an X-ray and electrocardiogram. For amounts less than $5,000 the applicant must share in the expense. They write their over age 70 insurance only on an annual premium basis.

He considered the mortality experience satisfactory so far, with death claims of less than $200,000 in eight policies up to the end of 1956.

MR. F. G. WHITBREAD noted that whereas in 1952 only about one out of six companies issued insurance at age 70 or higher now about three out of four do. He feels that the increased number of applications at these ages does not necessarily mean that there is an increasing demand for insurance but may mean only an increasing willingness to meet the demand.

He also thought that recent medical advances and present prosperity coupled with high taxes make the purchase of insurance worth while to many older people.

The Lincoln National issued $2\frac{1}{2}$ times as many policies in 1956 as they did in 1951 for ages 65 to 70, and for ages 71 and over about four times as many. In 1956 the number of policies issued at ages over 70 was about 40% of the number issued at ages 65 to 70.

Mr. Whitbread thought that the need for and purpose of the insurance appear little different from situations encountered at somewhat younger ages. However, they are especially careful in underwriting other cases where the amount seems inconsistent with amounts purchased earlier in life. The Lincoln National does not issue insurance on elderly dependents.

He mentioned that one of the more difficult problems with people in the older age brackets is the rating to be assigned to risks who are apparently substandard. He feels that the rating which would apply to a younger person might be too lenient or too severe for an older person.

MR. J. S. THOMPSON, JR., stated that in 1954 New York Life increased the maximum issue age for new life insurance from 65 to 70. He noted that, in spite of improved underwriting techniques, selection of risks at the advanced ages continues to involve certain special problems. The proportion of applicants at the advanced ages that are declined or classified substandard is higher than the corresponding proportion at the younger ages. Not-taken rates must also be expected to be higher. For these practical reasons, an age limit on new insurance is desirable.

He noted that almost 90 years ago, for about 25 years beginning in 1869, age 70 was the maximum age for new insurance in New York Life, so that it would be improper to regard the recent increases in maximum issue age as an innovation.

He stated that the need for insurance at the older ages is particularly important in the accident and sickness field. He brought out the fact that the need for coverage on medical expenses increases with age as the cost of medical care rises, while earned income normally decreases.

New York Life recently introduced two new hospital expense plans on an individual basis—the Lifetime Hospital Expense policy, available at issue ages up to 60, and the Senior Hospital Expense policy, issued at ages 61 to 75. Each of these policies provides lifetime coverage with no reduction in benefits. They are guaranteed renewable, although the company retains the right to change the table of premium rates on a class basis.

He mentioned that the premiums for the "Lifetime" policy are only slightly higher than those for the Company's prior hospital expense policy which had the same benefits but which expired at age 65. For a typical family group the increase is in the neighborhood of 5% to 10%.

The hospital confinement benefit of the "Lifetime" policy, subject to a $25 deductible, provides a daily benefit up to 365 days. The corresponding benefit provided by the "Senior" policy is limited to 60 days. The benefit amount for miscellaneous hospital charges is 15 times the daily hospital benefit in the "Lifetime" policy and 10 times in the "Senior" policy. Both policies have a surgical expense benefit on the basis of a schedule of applicable limits.

He reported that 11% of applications for hospital expense coverage have been at ages over 60 as compared to less than 1% for Ordinary life insurance, indicating the tremendous demand for medical expense coverage at the advanced ages.

He said that in spite of the fact that the proportion of applications for the "Senior" policy acceptable on the standard basis has been somewhat below that at the younger ages, they regard results in this respect as quite satisfactory.

MR. M. D. MILLER, discussing section E, believed that we should continuously re-examine our ideas of what we require to become a member of the Society and how our examination system is operating.

He warned that even though we are suffering from, perhaps, as great a shortage of numbers as our profession ever has had, we should nonetheless keep in mind the foundation of the Society's established standards of admission.

Our admission system has not purported and does not purport to qualify individuals as specialists in any phase of actuarial work. Instead, it is designed to deal with the fundamentals, the principles of actuarial science to a sufficient degree so that a successful candidate may be adequately equipped to work in any field and to acquire any specialized knowledge necessary to do so.

Mr. Miller thought the degree of specialization, perhaps, is not so great as one would think at first glance. The one new subject on the syllabus is individual accident and sickness. At this point there are still relatively few engaged in this activity full time; yet accident and sickness operations are sufficiently widespread and of such importance to argue for its maintenance in the curriculum for everyone. The subject of electronics and operations research is becoming important, but he feels that it is so new no one is sure how it will affect the actuarial profession. It hardly seems worth the time to consider this an area of specialization from the point of view of the course of reading.

He acknowledged that there has been a great growth in consulting work in the fields of pensions and other welfare benefits, but there is no greater degree of specialization in the knowledge necessary to deal with those matters from an actuarial point of view today than there has been in the past.

In answer to the question of why future consulting actuaries should study actuarial science as exemplified in company practice at all, he pointed out that actuaries tend to flow back and forth between consulting and company work. Also many small and middle sized companies still avail themselves of consulting actuarial service. He stressed that concern over the relationship to the Society of consulting actuaries who are members of the Society, or over the position of those who call themselves actuaries but who are not members of the Society, should not be permitted to divert us from our fundamental approach to membership in the Society or lead us to consider a reduction in the standards required for full membership.

He also discussed the practical difficulties that arose when we did have elective subjects. He felt that there were not enough candidates to arrive at a satisfactory passing standard. The average grades in the different subjects were found to vary over a wide range, the cause of which could not be pinpointed with any certainty.

The optional subjects were not only difficult for the Examination Committee to administer, but resulted in a great deal of student dissatisfaction.

Thus, Mr. Miller concluded, optional examination subjects are not the answer to any of our problems.

MR. WALTER SHUR thought that the actuarial examinations should be kept at a minimum level consistent with the high standards of the Society. Therefore, the examinations should cover only that material which is deemed to be basic and fundamental to the background of anyone who is accepted as a member. The degree of concentration in a particular area should be just sufficient to provide a solid base upon which technical and practical refinements can be built in the future if the need arises. If a particular subject is considered essential to the background of an actuary, it should be included in the examinations and every student should be required to study and understand this subject. If a particular subject is not considered essential to the background of an actuary, it should not be included in the examinations on either a required or an optional basis.

Mr. Shur indicated he was not in favor of making formal specialists out of members of the Society by means of post-Fellowship examinations. He pointed out that the Society is not large enough to justify such action. He also felt that it would be undesirable to extend the directed studies any further and every effort should be made instead toward encouraging independent thinking and analysis.

MR. J. K. DYER, JR. stated that there is considerable evidence indicating that our examinations are operating as roadblocks at both ends of the long road to Fellowship. At the beginning of the road, we may be screening out many whom we should be encouraging. At the end of the road there seem to be too many cases of experienced and well-qualified actuaries who are prevented from being officially recognized as such simply because they lack experience and detailed knowledge in specialized fields which do not happen to be their own.

It seemed rather clear to him that Parts 1 to 3 have, in possibly too many instances, discouraged promising students from giving really serious consideration to an actuarial career. Encouraged to try the preliminary examinations, the student does so without adequate preparation and fails to pass. At that point an actuarial career is lacking in appeal.

He concluded that the preliminary examinations should be carefully reappraised, from the standpoint of both their substance and the way in which they are used. He felt reasonably certain that they should be modified or diluted and their continued use for screening purposes should be seriously questioned.

The difficulties in finishing the actuarial examinations seem to be concentrated primarily in that ever-increasing group of Associates who decide to specialize before completing their Fellowship examinations. These people are found principally in the consulting offices, and many of them are, by virtue of their experience and specialized knowledge, just as much entitled to call themselves fully qualified actuaries as are the majority of our Fellows.

Although he had not attempted to delve into history in order to find out what the distinction between an Associate and a Fellow was originally intended to be, he strongly suspected that it was visualized as something similar to the difference that exists between a bachelor's degree, signifying a general broad education, and a master's or doctor's degree, signifying advanced knowledge and original work in some chosen specialty. If that was the objective, and if it still is, he felt our examination requirements are in need of a major reform.

He suggested a revision of the Associateship examinations in such a way as to demonstrate the possession of a broad education in actuarial matters, but avoiding the necessity of showing a highly specialized knowledge in any field except the most fundamental ones (principally the ones bordering upon pure mathematics). This would probably mean introducing the fundamentals of economics into the Associateship examinations, possibly also some aspects of law as it applies to actuaries, and at least a smattering of practically all of the present Fellowship subjects. By broadening the scope and diminishing the detail it would be possible, he thought, to accomplish this without any material increase in the number or volume of the examinations required for Associateship.

In order to qualify as a Fellow he visualized the election of possibly two specialties by each Fellowship candidate, who would have to take two comprehensive examinations (which might be subdivided), one in each of his chosen specialties. These examinations would probably be somewhat more searching than the Fellowship examinations now offered. In addition to these examinations in a "major" and a "minor" subject, the candidate might even be required to present an acceptable thesis or dissertation in his major subject, and possibly also meet some minimum requirement as to practical experience in his field.

Mr. Dyer recognized that these suggestions are somewhat revolutionary and there would certainly be some serious problems in the transition from the present system to the one proposed. He nevertheless urged that these suggestions be considered seriously, since he felt that our examination setup has gotten so far away from the realities of actuarial life today that its reformation requires a completely fresh approach.