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GENERAL

A. What new machines or procedures have recently been developed which are of especial interest to small companies?

B. Is it desirable for a small company to include waiver of premium disability in all policies without apparent extra premium charge? If so, what problems are likely to be encountered?

C. In view of the increase in the proportion of term insurance being sold, (a) do current term premiums make fair provision for their share of overhead expenses, term mortality and conversion costs, and (b) what will be the ultimate effect on agency personnel from standpoint of earnings?

MR. R. A. SAUNDERS discussed the adaptation of machines and procedures already developed by the larger companies to the needs of the smaller. The Equitable Life of Canada, with about $80,000,000 in force, has recently made a rather complete installation of I.B.M. procedures, with a minimum of equipment. Small companies are often deterred from the use of such methods because they fear their small volume of transactions will make the modern methods expensive. This may well be outweighed, he suggested, by the comparative ease of making the change before it is forced by the growth of business. Furthermore, economies may result earlier than expected because of additional uses of the machinery, not contemplated at the time of installation.

They changed from typed premium notices to an I.B.M. system based on that of the Canada Life, making the change-over agency by agency. Their equipment consists of a 405 tabulator, a sorter, and two duplicating punches, one alphabetic and one numeric. They plan to replace detail posting of paid premiums with an exception method of posting, as it appears that a machine listing of payments is an adequate record.

Valuation work was transferred from an I.B.M. service bureau to their own machines. They were agreeably surprised at the ease with which numerous other jobs could be introduced for the first time (e.g., persistency studies), or could be mechanized, such as policy loan interest accounting, reinsurance statements, and postdated checks for mortgagors and policyholders making monthly payments. A planning committee has been an important factor in gaining the maximum advantages of their machine operations.

MR. G. R. BINGHAM described a method which the Northern Life has used for several years to print tables of nonforfeiture values for their policies. The procedure requires only an I.B.M. punch and printing tabulator, and some form of offset press such as the multilith. If a company does not have such a press, the printing can be done by a commercial shop.

A file of about 30,000 punched cards was prepared, in which each card contained the nonforfeiture values for a single plan-age-duration combination. The cards were sorted into appropriate order for each plan-age group, and "total" cards were inserted at the end of each such group. The "total" cards contained plan-age totals of all fields to be listed.

The table of values for each plan and age was then placed on blank duplimats by listing the cards (except "total" cards) on the tabulator. The machine was wired to add the detail cards and subtract the "total" card, so that the absence of a total at the end of each table constituted a check on the accuracy of the process. The mats were then used on the multilith to print the desired number of tables on previously printed policy pages in which the "Table of Values" had been left blank.

Mr. Bingham's company has found the method quite satisfactory as compared to their former use of addressograph plates. The initial cost, at the time of the change to CSO premium rates in 1948, was considerably less than for addressograph plates. The trouble and expense of maintaining an adequate supply of policy values pages has been found to be quite nominal. At the next such change they again plan to produce the new set of punch cards which will be necessary by means of the cards used in computing the policy values.

MR. N. N. STROM reported that the Minnesota Mutual had recently instituted a new punch card method of valuing their 2,000 supplementary contracts not involving life contingencies. They maintain a file of status punch cards showing for each account the balance as of the date of the last transaction or as of the last year-end, whichever is later. As transactions occur, the debit or credit items are punched on transaction cards which are part of the regular accounting routine. At the end of each month, interest is calculated for cases which had any debits or credits during the month, by means of an I.B.M. 601 multiplier and a set of master cards. New status cards for these cases are then produced mechanically from the old status cards. Total interest is checked for reasonableness and total debits and credits are checked with the accounting department journal. Year-end work consists of doing the regular monthly work except that new balances are also calculated on cases that did not have a transaction during the last month.

His company has recently changed their insurance valuation from the attained age system to the group method, making use of a complete set of library reserve factor cards with five years' reserves on each card. They have about 170,000 policies in force in some 30,000 groups.

They have made another use of the I.B.M. 601 multiplier in calculating minimum cash values for a policy with varying amounts of insurance. They used an accumulation formula, and solved the machine problem of passing from negative to positive values by resorting to terminal reserves and the excesses of such reserves over the cash values.

MR. C. F. PESTAL, speaking on section B, discussed the automatic premium waiver benefit, which his company has been issuing for over three years. Their agents approve of it, as it eliminates denial of the benefit where the applicant is standard for life insurance. It also presents an advantage competitively in that the extra premiums are lower than those of companies issuing a nonautomatic benefit, and the agent makes all his comparisons on the basis of including the waiver benefit.

Mr. Pestal said they had found the underwriting problems to be mostly minor. They have received a few brokered cases where waiver has been refused by another company, but the underwriters can spot such cases and take necessary precautions. The attempt to issue this benefit to substandard risks up to 150% has caused some embarrassment because certain marked impairments will disqualify for waiver although the applicant is eligible for life insurance with a very light rating. Furthermore, it is hard to explain to an agent why, in some high premium plans, the extra premium for a 175% mortality rating without waiver is less than the 150% extra premium including the automatic waiver. In his opinion if the company were to issue the benefit now for the first time with the knowledge they now have they would probably issue the benefit on standard lives only. They solved the reinsurance problem by retaining their maximum issue as far as disability is concerned.

Since they assumed that the issue of the benefit to all risks would yield a better over-all experience than that which results from the elected benefit, disability premiums were based on a rate of disability substantially less than the Class 3 rate. A higher disabled life annuity was assumed because of the expectation that the policyholder will be less conscious of the automatic benefit and hence some claims of short duration will not be reported.

Negative reserves are inherent in most of this business, since the premiums are payable for life. In such cases they use half the net premium for the reserve.

In answer to questions from the floor, Mr. Pestal said that their term policies provide for conversion without evidence of insurability only to a whole life policy (or to a plan cheaper than whole life) if the automatic waiver is to be included. The insured has the conversion right even if already disabled.

MR. H. L. FEAY stated that the Manhattan Life has been issuing the automatic waiver benefit since January 1, 1948, and that they are pleased with it for the reasons cited by Mr. Pestal. They have had the equivalent of 125 million dollars exposure for one policy year, without any claims.

Premium accounting is simplified under this benefit, as it is much easier to derive ratios to divide total premiums between life insurance and disability. Valuation is not difficult, as average factors based on total insurance in force can be used. The factors can be determined at periodic intervals. His company assumes in such calculations that the premiums as well as the benefits terminate at age 60, and in their dividend formula for premiums collected after age 60 they add in, as part of the dividend, the charge for the waiver benefit.

Mr. Feay said that they are able to obtain reinsurance of this benefit without any trouble, other than some delay on occasional cases due to confusion in handling. As to term conversions and group conversions, they allow conversions to any plan, but the waiver benefit in any converted case will provide for the waiver of the Ordinary Life premium only. The policy lapses if the remainder of the premium is not paid by the policyholder.

MR. E. F. ESTES, with regard to section C, presented a number of tables indicating that current term premiums are somewhat too low under

TABLE 1

Age	Hypothetical Premiums	Average of Several Cos.
22	$ 7.71	$ 6.40
32	8.23	7.47
42	10.45	11.91
52	15.39	24.39

age 35 and too high above that age. For example, he had prepared ten year term premiums for certain ages based on the 1946–49 Select Basic Table (*TSA* II, 506), $3\frac{1}{4}\%$, 2.75 times Linton's A withdrawals, commissions and taxes of 40% in the first year and 7% renewal, and various assumptions for other expenses and contingency margins. These premiums he compared with the average of the nonparticipating, nonrenewable term premiums of a number of companies. The results, based on his lowest expense assumptions and without allowance for extra mortality on conversion, are as shown in Table 1. Mr. Estes arrived at similar results for level term riders and the family income rider.

He said that the Bankers Life of Nebraska discontinued full production credit and commissions on family income riders because they discovered it was resulting in a distorted relationship between an agent's production and his income.

MR. R. E. EDWARDS said the Baltimore Life had promoted the sale of larger term policies to encourage their agents to sell larger permanent policies. No such result was achieved. Permanent insurance sales were replaced by term insurance sales for larger amounts, but with smaller commissions. Ultimately the decrease in agents' earnings forced the company to increase commission rates on permanent plans.

Mr. Edwards pointed out that their market, as a combination company, is the industrial class of worker. In general, young and old workers get about the same wages. As a group this class has had a definite increase in real income in recent years and can afford permanent insurance better than any other group in our economy. Term insurance should not be sold in such a situation.