## TRANSACTIONS OF SOCIETY OF ACTUARIES 1960 VOL. 12 NO. 33

## ANNUAL STATEMENT

A. What methods are used in computing Incurred but Unreported Claims? Dividend items?
B. To what extent are approximations used in determining items for the Analysis of Increase in Reserve? What uses are made of this exhibit and do the benefits derived justify the work of preparing the exhibit?
C. What records can be closed out early to facilitate annual statement preparation?

Reporting on section A, MR. KARSTENS KENNEDY said Provident Life has found that one-third of a month's net claims has proved generally more satisfactory and accurate as a liability than a count of actual claims received after the year-end plus an estimate of still unreported claims on the date the count is made.

MR. RICHARD M. CARTER discussed the present value of claims not yet due on weekly indemnity accident and health. During the first six months of a year, where the policy limits benefits to 26 weeks, records are kept of payments on claims originating in the previous year. The payments are recorded for weeks of disability occurring in (1) previous year and (2) current year. The latter becomes the present value of amounts not yet due, for the previous year. A projection leads to the current liability, using a further relationship between the claim liability and the actual claims paid during the four weeks preceding and four weeks following the year end. The liability for amounts not yet due is then the total liability less the actual class (1) payments recorded during January of the new year.

MR. GEORGE M. SHERRITT, discussing section B, summarized the practices of Southwestern Life, where an accurate calculation of all items in the Analysis of Increase in Reserves is made. Mr. Sherritt cited the advantages of their system: (1) errors are easily detected in valuation reserves, net premiums and reserves released, and (2) it serves as a basis for estimating interim reserves.

The analysis of increase is computed by two separate work groups. One group uses conventional accounting data, follows the statement instructions to get tabular interest, and tabular cost becomes the balancing item. The other group works with mean reserves, policy year cost of insurance and net premiums in force to determine the calendar year cost of insurance. The principle used is to add one half the cost of insurance for the current policy year on business in force at the end of the year to one half the cost for the previous policy year on business in force at the
beginning of the calendar year. Tabular interest is determined according to the same principle. The balancing item for this calculation is "total reserves released," which is adjusted for nonanniversary terminations, premiums refunded beyond the date of death, initial term cases, policy changes and similar items.

By closely comparing the two sets of results, a discrepancy of $\$ 10,000$ in total mean reserves of $\$ 350$ million is easily detected.

The basic data are used for quarterly interim statements. His company has found there is a direct relation between expected mortality and insurance in force, and between reserves released and surrender payments, which is helpful in making projections.

MR. HARRY M. SARASON mentioned one danger in the system described by Mr. Sherritt, in accounting for transfers to extended insurance. In recent years the face amount after transfer is about the same as the net amount at risk before transfer. Mr. Sarason also commented that he will complete the Analysis for any client, provided they have a record of reserves released by death.

MR. EUGENE WISDOM encouraged the use of detailed calculations, for better control and also for use with interim statements. In making projections, he preferred to use reserves less deferred and uncollected premiums. This method causes less distortion in the interim statements of smaller companies.

MR. WILL W. JACKSON reported that he determined the tabular net premiums for the Analysis by applying the ratio of net to gross premiums derived from the year-end deferred and uncollected premiums.

MR. H. RAYMOND STRONG reported that the approximation method for interim reserve calculation based on the analysis of reserve increase formula gives results that are more consistent with year-end results than can be obtained in most any other way, even if a number of the items have to be estimated.

MR. LLOYD K. FRIEDMAN raised a question as to the proper net premiums to use for credit and group insurance. MR. SARASON suggested the gross premium could be used as the net in most cases.

MR. JOHN S. DIXON reported, on section C, that a series of closing dates can result in having complete statement data three working days after December 31. Valuations are made in November and December. New issues for the year are completed on December 22. Disbursements end on December 29; emergency checks are normally dated January 2 of the following year and released as needed.

