REPORT OF COMMITTEE ON COMPENSATION AND LIABILITY LOSS AND LOSS EXPENSE RESERVES

During the past few years considerable dissatisfaction has been expressed, publicly and privately, with regard to the Schedule P method of establishing and exhibiting compensation and liability loss and loss expense reserves for annual statement purposes.

One source of such dissatisfaction is in the utilization of the Schedule P "remainder" as a minimum reserve for each of the three latest policy years. A special section of this report deals with the whole question of minimum reserves, with particular reference to the appropriateness of the Schedule P method.

Another important source of dissatisfaction lies in the lack of information as to the constituent elements of the case estimate total. The scrutiny of an individual carrier's annual statement does not indicate whether provision has been made for unreported claims and the amount of such provision, whether provision has been made for outstanding loss expense and the amount of such provision, whether a reserve for undisclosed occupational disease claims has been included and the amount of such reserve, etc. The present annual statement schedules are so unsatisfactory in this regard that certain carriers have themselves modified the method of exhibiting loss and loss expense reserves. For example, certain carriers set up separate reserves for loss expenses and deduct these amounts from the Schedule P "equity", if any. It is quite obvious from the foregoing brief discussion that there is an almost utter lack of uniformity in treatment, most of which is directly attributable to the deficiencies in the annual statement schedules themselves.

Before proceeding with its report, the Committee is first recording the five fundamental principles laid down by the previous Committee (*Proceedings*—Volume XVII), together with the present Committee's comments thereon.

- 1. The loss reserve should be based solely upon claims (and medical) excluding loss expense. Comment: The Committee is in entire agreement with this principle.
- 2. The loss reserve should be based upon individual estimates of outstanding claims (and suits). Comment: The Committee is in agreement with this principle but would substitute "individual estimates (or their equivalent)" for "individual estimates".
- 3. A minimum reserve based upon a pure loss ratio check should be applied for losses under policies issued in the three latest policy years. Comment: The Committee is in disagreement with this principle, particularly in view of developments during the intervening years, as will be commented upon more fully subsequently in this report.
- 4. A reserve for a loss expense (both allocated and unallocated), to be determined by formula, should be set up on the "Liabilities" page of the annual statement. Comment: The Committee is in agreement with this principle, except for the determination of such reserves by a single set of formulae applied to all carriers.

5. Schedules for showing the policy year average paid and incurred costs per accident and developments of policy year incurred losses by calendar year should be provided as a check upon the accuracy of reserves and to enable companies to determine loading factors to be applied to incurred or outstanding losses where experience indicates that such a course is necessary. Comment: The Committee is in agreement with this principle insofar as it relates to the development of incurred losses, as exemplified by the present Parts 5 and 5A of Schedule P.

MINIMUM RESERVES - SCHEDULE P

The establishment of appropriate reserves for liability and workmen's compensation losses has been a major problem ever since the origin of these lines of business. During the early years, loss reserves estimated on a case basis were occasionally found to be under-estimated. In an effort to remedy this situation, certain standards were established which for the most part provided for setting up minimum reserves of a fixed percentage of earned premiums less losses and loss expenses paid for certain policy years. At the present time for each of the three latest policy years, the higher amount is taken as between the aggregate of case estimates and the amount remaining after deducting loss and loss expense payments from stipulated percentages (60 per cent. for liability and 65 per cent. for compensation) of earned premiums. In other words, for reserve purposes, minimum combined loss and loss expense ratios are assumed for each of the three latest policy years for the respective lines.

The members of the Society are familiar with the criticism leveled at the Schedule P method of establishing minimum reserves. Much of this criticism deals with the appropriateness of the premium base, i.e., the inadequacy of the assumed loss ratio due to: deviations from standard rates, retrospective rating, Massachusetts compulsory coverage, inadequate deposit premiums, etc. There is an inherent difficulty in satisfactorily defining a "standard" premium for minimum reserve purposes, not to mention the expense and time delay of compiling such standard premiums if a satisfactory definition could be found. This difficulty will undoubtedly increase in the future, particularly with the growth of "all-inclusive" policies. In fact, certain carriers are already writing automobile insurance with a single premium for both bodily injury and property damage coverages, so that the problem is no longer academic. The Committee believes that even at the present time it is impossible to utilize a premium base satisfactorily.

Another factor which deserves mention is the fact that the present Schedule P method gives distorted loss ratio and earnings results. A currently bad underwriting situation can be completely counteracted by a reserve release from a prior and favorable loss ratio year. This objection is not peculiar to the present Schedule P method but is inherent under any minimum reserve requirements.

It seems to the Committee that the intended purposes of minimum reserves should be fundamentally re-examined. Undoubtedly the chief purpose of minimum reserves is to guarantee adequate reserves. After careful study,

the Committee has concluded that this purpose cannot be met by the present Schedule P method or any other formula method for etsablishing minimum reserves. In actual practice, it is believed that the present Schedule P method has not succeeded in preventing or reducing losses to policyholders when carriers have become insolvent. The loss elements which make for insolvency are the same elements which make a minimum reserve method inoperative. The only positive accomplishment of the present Schdule P method appears to be to penalize the surplus of companies having better than average loss ratios.

The Committee has given considerable thought to the question of minimum reserves and has reached the conclusion that the problem is really one of reasonably adequate reserves and that formula methods are not a solution. The Committee believes that appropriate statistical indications provide a better approach to the problem.

COMPENSATION LOSS RESERVES

Recently a suggestion has been advanced for building a minimum reserve by applying standard table values to the aggregate weekly indemnity and numbers of cases of outstanding losses grouped according to elapsed duration. (*Proceedings*-Volume XXXIII.) In this article there is pointed out the weakness of the present Schedule P loss ratio basis of establishing minimum reserves in a period when the graduation of expenses by size of risk is assuming greater importance. Obviously, a basis of minimum reserves which is independent of premium would avoid this difficulty.

The Committee has given careful consideration to this plan from the standpoint of reasonably *adequate* rather than *minimum* reserves. The conclusion was reached that since the effective field for the operation of the standard reserve table method narrows down to a small fraction of the total liability for unpaid losses, the additional work involved in imposing an additional reserve system would not be justified.

In the course of its deliberations, the Committee became convinced of the possibility of reasonably determining the aggregate reserve for known cases based on the individual circumstances of each case. The necessity and importance of assigning and maintaining a proper estimate of total cost to each individual compensation case prior to its termination is kept constantly before the carriers because of the demands for such data for unit reports, experience rating, retrospective rating, contingent commission arrangements, agency and branch office records and risk underwriting records.

Since the liability for outstanding losses on known cases represents the bulk of any estimate of the aggregate liability for unpaid compensation losses and if, as the Committee believes, the outstanding losses on known cases can be determined with reasonable accuracy, this provides a good foundation upon which to build the complete loss reserve. There, of course, must be added to the reserve for known cases, supplementary reserves for less definite liabilities, such as reserves for incurred but not reported cases, reopened cases, adverse developments, and occupational disease accrued liability. In the establishment of these supplementary reserves, each carrier

must be guided by its own experience, because of marked differences in claim administration practice.

After the aggregate reserve has been established on the foregoing basis, there remains the question of a reasonable test of adequacy. While the method of averages per reported claim is undoubtedly useful for an individual company, the Committee discarded it for standard test purposes since counts are not uniformly made by all carriers and difficulty would probably be experienced in completing the count at an early date. Moreover, changes in coverage and in claim administration may from time to time influence the definition and cost of a reported claim.

In its search for a more dependable test of adequacy, the Committee selected the rate of payment of compensation losses (indemnity and medical combined) as a satisfactory yardstick with relatively few statistical disadvantages. The rate of payment of compensation losses is largely dictated by statute and the desire of carriers to discharge their obligations promptly. The consistency in the rate of compensation loss payments may be coupled with the stability of the successive valuations of accident year incurred losses, as presently displayed in Schedule P. Part 5A, to provide a simple reserve test. It is believed that an exhibit which shows the percentage of incurred losses (latest valuation) which has been paid at annual intervals for each of several recent accident years will furnish a satisfactory means of testing the adequacy of current reserves.

Barring unusual circumstances, the ratio of paid to incurred for any accident year should bear a close resemblance to the corresponding ratio for previous years at a similar stage of development, providing the incurred losses include reserves for outstanding losses which have been consistently estimated. In those instances where a material variation is noted, a satisfactory explanation should be found for the departure or else the inference is that the difference has resulted from a change in the degree of adequacy of the outstanding losses included in the incurred losses.

Exhibit A is a modification of the present Schedule P, Parts 5 and 5A, embodying an exhibit of accumulated paid losses by accident year at successive year-ends. Provision is included for showing the ratio of the compensation paid amounts to the amount of incurred losses as of the latest December 31, the statement date. The outstanding losses as of statement date are also displayed by accident year. The total of this column will agree with the amount shown on the liabilities page of the annual statement. The right-hand section of Exhibit A is composed of data essentially the same as that now required by Schedule P, Parts 5 and 5A, except that the analysis by policy year of the present schedule has been omitted as no longer essential.

Summarizing the Committee's recommendations as respects the reserves for compensation losses, it is advocated that the loss reserve be composed of the aggregate of individual estimates of known cases plus the supplementary reserves to which reference has been previously made. The introduction of a schedule similar to Exhibit A as a part of the annual statement requirements will provide a statistical signal indicating any marked variation from previous experience trends.

AUTOMOBILE BODILY INJURY LIABILITY LOSS RESERVES

As with compensation, the Committee believes that it is possible to determine reasonably the aggregate reserve for known cases based on the individual circumstances of each case. Here, also, it is necessary and important to assign and maintain a proper estimate of total cost to each individual case because of the demands for such data for internal and external statistical compilations. With the addition of supplementary reserves, such as reserves for incurred but not reported cases, reopened cases, and adverse developments, there remains the question of a reasonable test of adequacy of the aggregate reserve thereby produced.

In its search for a dependable test of adequacy, the Committee was forced to recognize that for theoretical reasons, a relatively simple test similar to that devised for compensation, even with the utilization of the number of notices, would not be sound. Unlike compensation, in automobile liability insurance, the rate of payment is not dictated by statute; rather, business judgment dictates variations in the rate at which cases are settled. Secondly, and at times of even greater importance, inflationary trends result in higher average costs per case by settlement date. While the Committee believes that individual carriers should be encouraged to maintain their own statistical controls on rate of liquidation and average cost per case and to utilize them fully in establishing adequate reserves on individual cases, it does not believe that it is feasible to devise a test based thereon for uniform application to all carriers.

The Committee accordingly concluded that the same form of reporting as is being recommended for workmen's compensation (Exhibit A) should be recommended for automobile liability reserves, with the omission of the ratios of the paid amounts to incurred losses.

BODILY INJURY LIABILITY OTHER THAN AUTOMOBILE RESERVES

With regard to liability other than automobile, the problem is even more difficult than automobile liability since the business written by various carriers is not sufficiently homogeneous to permit generalizations. Moreover, changes in the distribution of business by coverage within a carrier from one year to the next can easily render ineffective any statistical tests which might be devised.

The Committee merely directs attention to the circumstance that while the problem of evaluating a reserve established by a carrier for the liability other than automobile lines is a difficult one, its importance is considerably less than that of compensation and automobile. Except for a limited number of specialty carriers, the reserve for liability other than automobile will be, in general, a relatively small part of the total reserve for all lines.

The Committee accordingly recommends that the same procedure be followed as with automobile liability and that the results be similarly exhibited in Exhibit A.

LOSS EXPENSE RESERVES

The present Committee agrees with its predecessor that separate reserves for compensation and liability loss adjustment expense would be set up on

the liabilities page of the annual statement, but does not feel that any uniform formula would produce reasonable and adequate results for all companies. The Committee recommends, rather, that companies be permitted to establish these reserves by their own methods. There seem to be no particularly impelling reasons why loss adjustment expense reserves on liability and compensation should be singled out and given different treatment from that accorded similar reserves for the other lines of business.

There is far too much variation between companies as to loss adjustment costs to warrant a uniform formula. Reference to the Casualty Insurance Expense Exhibit reveals that for the year 1947 the ratio of "claim expenses" incurred to premiums earned varied from 6.5% to 14.5% for automobile liability and from 2.8% to 12.3% for workmen's compensation, as between individual companies writing at least \$1,000,000 of premiums in each case. Nor is this the result of wide variation in loss experience for these same figures converted to percentages of losses incurred show a variation from 13.5% to 27.3% for automobile liability and from 4.6% to 22.1% for workmen's compensation,

The Committee believes that reserves for loss adjustment expense should be set up on the basis of a company's own experience and judgment. As with other lines of insurance, the Committee feels that a check of the method followed in arriving at such reserves is properly the concern of periodical Insurance Department examination.

RECOMMENDATIONS

Based for the most part upon the foregoing, the Committee's recommendations are as follows:

- 1. Separate reserves for losses and loss expenses should be carried for compensation, automobile bodily injury liability, and bodily injury liability other than automobile, respectively.
- 2. The reserve for compensation, automobile bodily injury liability, and bodily injury liability other than automobile losses, respectively, should be shown in the same detail as for other lines, i.e., broken down as between reported and unreported with a further indication on compensation as to how much of the unreported reserve consists of a reserve for undisclosed occupational disease claims.
- 3. The reserve for losses should be based upon individual estimates of claims (and suits) or their equivalent.
- 4. The reserve for loss expense (allocated and unallocated) should be based upon the anticipated expense of the individual carrier.
- 5. The present Schedule O should be expanded by the addition of lines for compensation, automobile bodily injury liability and bodily injury liability other than automobile, respectively.
- Except for Parts 5 and 5A, which would be continued in revised form as the proposed Exhibit A, the present Schedule P should be discontinued.

* * * *

With the probability that major changes in the annual statement blank may occur in the near future as a result of the proposed new blank for fire and casualty companies, or as a result of studies now in progress by the Committee on Uniform Accounting of the National Association of Insurance Commissioners, the Committee believes that the present time is particularly appropriate to consider the subject matter of this report. It is quite obvious that the blank may be greatly simplified if the determination of loss adjustment expense (in total or by line of insurance) is deferred for inclusion with the subsequently filed Insurance Expense Exhibit.

The point may be raised, as it was when the previous Committee reported, that the proposed changes are not in conformity with the present loss reserve requirements embodied in the statutes of certain states. Here, the present Committee can only reiterate what the previous Committee stated, that is, that it "feels that its problem is to determine proper reserve bases regardless of existing statutes".

HARMON T. BARBER
JOHN W. CARLETON
HOWARD G. CRANE
NORTON E. MASTERSON
VICTOR MONTGOMERY
DUDLEY M. PRUITT
JOSEPH LINDER, Chairman

DÉVELOPMENT OF LOSSES

COMPENSATION

Acc.		Accumulation of Paid Losses at end of:								Outstanding	Incurred Losses at end of:					Acc.	
Year	lst Yr.	%*	2nd Yr.	2*	3rd Yr.	%*	4th Yr.	%*	5th Yr.	9,0	12/31/49	lst Yr.	2nd Yr.	3rd Yr.	4th Yr.	5th Yr.	Year
Prior	×		×		x	1 1	x	1	x			×	x	×	×	x	Prior
1945				1 1		1 1]				ļ					1945
1946		1		} }		1 1			×	1		ì				x	1946
1947	 	1 1		1 1		1 1	x	1 1	x	1 1		l			×	x	1947
1948		1 1		1	x	1 1	x	1	x	1 1				x	x	x	1948
1949	ı		x	1 1	x	1 1	x	1 1	x				x	x	×	×	1949
							Total			Total							

^{*} Percentage of Paid to incurred as of December 31, 1949.

AUTOMOBILE LIABILITY

Acc.		Accumula	tion of Paid Los	sees at end of:	Outstanding	Incurred Losses at end of:						
Year	1st Yr.	2nd Yr.	3rd Yr.	4th Yr.	5th Yr.	12/31/49	lst Yr-	2nd Yr.	3rd Yr.	4th Tr.	5th Yr.	Year
Prior	х	×	х	x	×		x	x	х	x	х	Prior
1946		\		1	1		1					1945
1946		}	ſ	<u> </u>) x		\				x	1946
1947)	}	×	×		1	i		x	x	1947
1948)	x	×	x		1		x	x	x	1948
1949		×	x	×	x		l	x	x	x	x	1949
					Total		Total					

LIABILITY OTHER THAN AUTOMOBILE

Acc.			ion of Pald Los	ses at end of:		Outstanding	Incurred Losses at end of:					
Year	lst Yr.	2nd Yr.	3rd Yr.	4th Yr.	5th Yr.	12/31/49	lst Yr.	2nd Yr.	3rd Yr.	4th Yr.	5th Yr.	Year
Prior	×	×	x.	×	x		x	x	x	x	×	Prior
1945		1	1	1	1 1							1945
1946		1	1	1	x [ļ				×	1946.
1947		1	ł) ×	×		i	ł		x	x	1947,
1948	ľ	ì	×) x) x }		}		×	x	×	1948
1949		×	×	×	x		1	x	x	x	×	1949
					Total		Total					