There are a few other items that were not fully covered in Mr. Balcarek's paper which I believe to be pertinent.

First, it was mentioned in the paper that "most companies make the reserve for reopened claims a part of the reserve for Incurred But Not Reported Claims." Although this may be a true statement, it implies that such a procedure is proper. Actually the liability for reopened claims should be included in column 1 of page 9 of the annual statement—"Adjusted or in Process of Adjustment." Column 4 on page 9 is limited to an estimate of claims not yet reported or known to the company. It is my belief that the assignment of reserves to column 1 or 4 is perhaps of no material consequence, because it is the accuracy of the total reserve in column 5 that really counts; nonetheless, it is well to point out that the reopened claim liability is not a segment of the INR liability—whether or not it is included in column 4—and thus its measurement should be quite independent of the measurement of INR liability.

Second, it should be noted that the method proposed in the paper could be adopted by other companies but not the specific formula or the relative cost values. These are only appropriate for the author's company. Reopened claim statistics vary from company to company depending upon claim closing practices.

The third item that should be pointed out is that the need for a separate reopened claim reserve exists only for those companies which use individual case estimates in compiling their aggregate loss reserves. Because individual case estimates provide for *reported and open* loss reserves, additional reserves for reopened claims—and another for additional payments—are necessary to make up the total liability for reported claims. For companies using a formula basis to measure their reported loss liability, the entire liability is provided for in the formula. The elimination of coding and recording reopened claim data is one of the several advantages of the formula reserve method.

In conclusion, Mr. Balcarek's paper will add to the somewhat meager reference material on the complex subject of loss reserves in our *Proceedings*. It is hoped that this paper will stimulate interest and encourage others to present papers on other facets of loss reserving techniques.

A STUDY OF THE SIZE OF AN ASSIGNED RISK PLAN

BY

FRANK HARWAYNE

Volume XLVIII, Page 9

DISCUSSION BY P. S. LISCORD

"What can be expected as the normal size of the New York Automobile Assigned Risk Plan?" Mr. Harwayne attempts to answer this question by reducing the acceptance or rejection by underwriters of automobile risks in the

State of New York to a consideration of the accident records over a three-year period. He further reduces this criteria to an examination of bodily injury claim frequency by classification, assuming 50% of such a figure as involving fault on the part of drivers. From this base, he then determines the percentage of drivers free of liability over the three-year period, and compares this with the percentage of business voluntarily written. The resultant ratio and its relation to unity indicates whether or not the number of assigned risks is greater or less than can be expected.

Mr. Harwayne's study shows, at least for the first half of 1959, that the size of the New York Assigned Risk Plan was about normal. Furthermore, it shows a disproportionate share Class 2 drivers in the Plan. Since the period measured is before the introduction of the new crediting procedure for writing Class 2 risks voluntarily, this is not surprising.

As Mr. Harwayne points out, the result is only a rough estimate and subject to criticism on various scores, particularly concerning some of his basic assumptions. However, there is only one point on which I would like to comment. This has to do with the relative lack of responsiveness of the final index. In this respect a relationship of the number of assigned risks to the number of accident-free drivers as derived from the number of claims might prove more responsive.

While the general introduction of safe-driver plans in the State of New York has all but reduced this particular approach to an academic exercise, the technique outlined is worthy of study particularly on the part of students and prospective actuaries and as such is a welcome addition to our *Proceedings.*

COSTS OF HOSPITAL BENEFITS FOR RETIRED EMPLOYEES

BY

MURRAY W. LATIMER

Volume XLVIII, Page 13

DISCUSSION BY A. D. PINNEY

Mr. Latimer has presented to us his detailed analysis of a specific request from a large company to give them an estimate of the cost of providing retired hospital benefits for their employees, and more specifically, to provide for the advance funding of these benefits similar to the approach used for their pension program. This is neither a theoretical study being offered by the author as the best solution to a major current problem, nor is it merely a statement for the record of something commonly being done in the industry since, to my knowledge, no company has used this particular approach.

It is, instead, a case study from which a great deal can be gained, particularly since it has been so thoroughly and painstakingly prepared. For example, one cannot read this paper without being aware of one of the major