The second principal aspect discussed was the effect of such plans in depopulating the assigned risk plan. It was stated that such a plan should, in the long run, provide a freer market for poor risks outside of the restrictions of the assigned risk plans. In particular this should apply to those marginal risks currently going into the assigned risk plans. In the discussion it seemed to be generally agreed that this was something to be hoped for; but even if it did come to pass, there still would be need for assigned risk plans for the really "bad" risks.

In conclusion, I believe that those who participated in the discussion on the practical aspects of automobile merit rating would agree that no startling conclusions were reached but we hope that those who have not worked closely with the development and introduction of these plans learned more about them. There is a wide field for future discussions on a number of the different practical aspects of merit rating plans.

RATE MAKING AND STATISTICS FOR MULTIPLE PERIL POLICIES

(SUMMATION BY ERNEST T. BERKELEY, ACTUARY, EMPLOYERS' GROUP)

Our seminar was based on a paper that was presented to the Society last fall by Bob Hurley on "Multiple Peril Rating Problems—Some Statistical Considerations" and the discussion at both of the seminars was opened by a review of that paper by Paul Otteson.

Bob Hurley wasn't able to be there, but Paul did an excellent job in setting the stage for our discussion. Both sessions of the seminar were very well attended and I thought there was excellent audience participation. The seminar concentrated on a Homeowners policy on an indivisible premium basis as a prime example of a multiple peril policy. One of the interesting points that came out was that after a show of hands I discovered practically everybody in the room had a Homeowners policy except myself! I'm not quite sure, but I wonder whether that's why I was chosen to moderate the seminar so that I would see the light of day and get one myself.

The paper and the review were in a sense initial surveys of the proper statistics and rate making for multiple peril policies and were of necessity pretty well confined to general considerations and delineation of the problems involved rather than the proposal of definite solutions.

In the seminars, before undertaking a detailed discussion of the points raised in the paper and review, it seemed advisable to set the stage by recalling briefly the history of the Homeowners policy including its origin, coverage, statistics and rate making. The early pattern, I'm sure, is a familiar one to everybody. The removal of the restrictions of the Appleton Rule in 1949 made it possible to combine fire and extended coverage, theft and liability coverages in a single policy which could be written by either a casualty or a fire company. There is no need to recount the enthusiastic reception on the part of the public, the agents and initially at least the companies.

At this point I want to state that the following allegory can't be blamed in any way on the seminar; I must take full responsibility for it myself:

> The companies fairly quickly realized that in the Homeowners policy there had been created a kind of insurance Frankenstein whose carcass had been made out of various separate members by sewing them together with a stout thread in an indivisible manner. The proto-type of this creature came from the North America laboratories in Philadelphia in 1950 and was joined shortly in 1952 by a twin brother made in the Multiple Peril factory in New York. These two croppers worked diligently in harvesting the lush crop from the Homeowners field, but soon the twin brother, at least, developed a rather disturbing habit of putting more and more of the clover in the bags of the agents.
>
> It wasn't long before a cousin Frankenstein appeared on the scene, again from New York, but this time from Inter-Bureau Incorporated in 1954 in the form of the comprehensive dwelling policy. His life was destined to be brief for the thread that held him together was weak and several years later he literally fell apart into his original pieces.
>
> Our twin brother, heartened by the disintegration of this rival and encouraged by his own amazing growth and stature, demanded a new suit. He got it in 1958 in the form of the "new" Homeowners policy, which was a patchy sort of job, coming partly from his own suit and partly from the suit of his departed cousin, the Inter-Bureau relative.
>
> He had no more shaken the wrinkles out of this clothing than he felt the need of another new suit in 1959—otherwise known as the "new, new" Homeowners policy. But the tailors were running short of cloth and had to ask the agents if they could spare a little, so that the great frame of our Frankenstein might be fully covered.
>
> Busy with his harvesting, Frankenstein suddenly becomes aware of the approach of an intruder and looking up he sees coming down the road from the automobile field another cropper astride of what appears to be a harvesting machine of colossal proportions. Momentarily stunned, Frankenstein quickly remembers his mail-order catalogue and makes a mental note to go through it that night to see if he can find a much larger model of the old-fashioned lawn mower he has been using.

Now back to the seminar.

It was noted that the Homeowners statistical plan in current use (Multi-Peril Insurance Conference (Inter-Regional) is designed to produce calendar year earned premiums and losses incurred by state and policy form with supplementary information available by zone, construction and protection and cause of loss. Rates have been made from three ingredients mixed in certain proportions according to a sort of homemade recipe and containing the ever necessary herb of credibility flavored with an unusual type of seasoning. These ingredients are as follows.

1. The rates currently in effect,
2. The current rates modified to reflect the calendar year loss ratio indications, and

3. The sum of the current rates for the component coverages in the policy suitably discounted for the term feature, loss and expense savings from packaging, etc., and whatever saving there may be from commission assumptions.

This is basically a loss ratio method of rate making, which is not surprising because a very large proportion of the premium on Homeowners policies is accounted for by property coverages, the rates for which are usually made on a loss ratio basis.

Since this method of making Homeowners rates is not strictly the product of actuarial research and study but rather a procedure that has been developed with considerable emphasis on underwriting and production factors, the inquiring actuarial mind has discovered various basic questions that should be answered to make certain that Homeowners rate making is on a sound foundation. The usual reaction of the actuary who makes his first appraisal of this problem is something like the mosquito that has gotten into a nudist colony. He knows what he ought to do but he doesn't quite know where to begin.

After covering the foregoing historical aspects the seminar proceeded with a discussion of the principal points brought out in the paper and review, which may be summarized as follows:

1. The type of exposure that should be used in rate making including the present earned premium base and other possibilities such as the number of policies, the amount at risk or some composite.
2. The use in rate making of information pertaining to the cause of loss. The causes of loss include fire and lightning, windstorm and hail, water damage, theft, liability and miscellaneous property losses.
3. Possible extension of the present classifications of policy form, construction and protection to include other variants like occupation of the insured and perhaps his income level.
4. The ever-present question of credibility with consideration of premiums or number of claims or perhaps losses as a base.
5. Several miscellaneous points including the variation in loss frequency for windstorm versus other coverages and the associated windstorm catastrophe hazard.

The estimated frequency of loss of 20 per 100 Homeowners risks is very similar to the frequency on the all-coverage automobile policy, which raises the very interesting possibility of a merit rating plan for Homeowners as well as automobile.

As can be seen, these are all questions which, quite naturally, cannot be answered either quickly or easily. This poses still another question and that is who is going to undertake the research and study that is essential for sound answers?

Certainly any real progress must rest on a well-planned program and not on the occasional paper contributed by members of our Society nor on the actuarial committee of member companies of a rating organization. The exact shape of such a program is not apparent at this moment, but its development would seem to require the application of much time and thought which might be forthcoming from some generous and well-staffed company or a full-time actuary in a rating organization or some combination of the two. Certainly any line of business that is already producing close to half a billion dollars in annual premium, and is still growing, deserves the benefit of all the actuarial talent it can get.

PREMIUMS AND RESERVES ON NON-CANCELLABLE AND GUARANTEED RENEWABLE A & S POLICIES

(SUMMATION BY JOHN H. MILLER, VICE PRESIDENT AND SENIOR ACTUARY, SPRINGFIELD-MONARCH INSURANCE COMPANIES)

I feel some diffidence in bringing you from the esoteric realms of negative binomials and Poisson distributions to the very pedestrian business of health and accident insurance. I had always thought that Poisson distribution referred to some method of merchandising fish, so I see that I'm going to have to get a little further education on the subject.

Mr. Barber's mention of accident proneness in respect to automobile insurance reminded me of the old chestnut I'm sure you've all heard; but it describes, I think, better than anything else the problems of health insurance. That is, the statement that to collect on a life insurance policy you must die; to collect on an accident insurance policy you must have an accident; to collect on a health insurance policy you must have a policy.

In connection with the auto merit rating plans, something was said about off-balance which is a perpetual state of the health insurance company. There are two general categories of companies in this business; there are those which consistently make a profit, perhaps a nominal one, and are severely castigated for gouging the public and then there is the other class that consistently loses money and they are severely castigated by their stockholders and critics in general for not knowing how to run their business. So you see you just can't win!

In our seminar yesterday there was some discussion of the federal income tax. The new life insurance tax law affects many companies—not only as to the tax on their health and accident insurance but also as to the classification of the company. As I think most of you know, the definition of life insurance reserves in the Federal tax law includes not only life insurance but non-cancellable insurance and adjustable premium guaranteed renewable health and accident insurance. There are companies which write no life insurance at all that are classified as life insurance companies for tax purposes because their reserves on these types of health and accident insurance with renewable guarantees are more than half of their total reserves. If they don't meet that test then they're taxed as stock or mutuals as the case may be, so that health and accident business may be taxed in different ways according to the way the company writing the business is classified.

The title of this seminar gave a little trouble. I was asked if it was correct.