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UNDERWRITING

A. In view of the substantial progress in reducing occupational hazards in industry and of the marked rise in the standards of living of employees in industry, has it become appropriate to consider granting standard insurance to persons in virtually all occupations hitherto rated substandard?
B. In view of the improvement in civilian flying safety and of the greater flying activities on the part of a large portion of the population, does it appear appropriate to consider granting standard insurance to most civilian flying personnel?
C. If most civilian aviation and other occupational hazards were disregarded, would consistency require changes in the underwriting of certain physical impairments? What changes, if any, seem indicated?
D. To what extent would "standard" mortality be affected by each of the measures indicated in A, B and C above?

MR. A. A. WINDECKER said that the life insurance industry has been reducing occupational, civilian aviation, and physical impairment extras from time to time as new information and data have justified such reduction. Competition has speeded the process.

Occasionally, as recently occurred in the case of airline pilots, reductions have been made in advance of supporting data. Nevertheless, there are justifications; first, in some cases, the proper extras are so small that they are more trouble to collect than they are worth; second, further improvements in extra mortality may be anticipated; third, the general improvement in mortality may justify expanding the standard classification to absorb some of the substandard area; fourth, the physical condition of airline pilots is better than that of other applicants; fifth, policy size is higher than average. The first company to eliminate the extras presumably had confidence that it could handle the business at a profit, and it received favorable publicity for being first. Competing companies followed similar practices when to their advantage.

Mr. Windecker did not believe that any company would find it advantageous to lead the way by dropping practically all civilian aviation and occupational extras, because it would not be to the advantage of the industry to fall in line. The lead company would get a lot of aviation and occupational business and might end up with an unfavorable net cost.

MR. R. E. MOYER said that the John Hancock made a substantial downward revision of its occupational ratings in 1954, considerably shortening the list of occupations rated. In addition to actual available experience, account was taken of the elimination of accidental and health hazards generally and the better living standards in occupations previously rated. They are studying further reductions.

He has noted a tendency to treat as standard many risks formerly considered substandard. In 1953, 5.3% of ordinary policies were issued substandard, and in 1955, 4%; by amounts, the figures were 7.2% and 5.8%. More lenient treatment of occupational, physical, and aviation risks contributed to the reduction.

Mr. Moyer said the question might well be asked as to whether a still larger amount of this substandard business might be considered as standard, particularly if the extra premium charged was small. He believed that policyholder equity prohibits the inclusion in the standard category of risks known to be substandard. At the same time, the application of fine gradations between classes is not warranted.

MR. A. C. WEBSTER said that the Mutual of New York investigated its own mortality experience on occupational ratings, covering the years 1935–53 exposed to 1954. In the group where extra premiums were $3.75 or less per thousand, the actual death cost was 81 cents per thousand. Therefore, they decided to remove practically all two-dollar extras. Taking the actual-to-expected mortality on nonmedical business (under which most of the occupational extras come), they found that the change would have increased the ratio of actual-to-expected from 88 percent to 91 percent. Even if a larger number of policies with occupational ratings were anticipated, the ratio wouldn't rise more than another 3 points.

The figures in the British Registrar General's Reports indicate that the mortality gap between the professional classes and the artisan classes is narrowing quite distinctly.

Mr. Webster did not believe similar action could be extended to physical impairments, because they represented departures from the normal. Occupational mortality, on the other hand, represents class mortality for which the differences are gradually disappearing.

MR. H. F. GUNDY said that the 1928 *Joint Occupation Study* and the 1937 *Occupation Study* are out of date. More recent industrial studies are difficult to relate to the life insurance business. The Sun Life investigated its own occupational mortality experience recently; finding a distinct improvement, they made certain reductions. The National Office of Vital Statistics is compiling occupational figures for male lives based on the 1950 census.

One question is the proper minimum occupational extra. The 1950 report of the British Registrar General shows that the excess mortality is concentrated at the younger ages, between age 20 and age 40 or 45. This concentration of the extra hazard at younger ages means that a $2 extra per thousand will cover extra mortality of over 100%, and Mr. Gundy thought a $2 minimum extra was reasonable.

There are still extra occupational hazards—for example, mining and various sections of the construction industry. Therefore, he thought it was proper to make a detailed study of the list of occupations rather than remove extras on broad groupings.

MR. J. E. MORRISON said that, within the past year, the Great-West Life has liberalized its underwriting for a broad class of occupational risks and civilian aviation risks.

In the case of occupational risks, the principal change made was to eliminate ratings with a gross extra premium of $2 per thousand. This moved about one-half the rated occupational risks into a standard classification. If all risks formerly rated for occupation were classified standard, the company's standard mortality would be increased from 100 percent to 100.3 percent. The effect of moving the best half of the occupational risks into the standard group would, therefore, be less than 15/100 of 1 percent.

Mr. Morrison said that while 2.5 percent of Great-West business had been rated for occupation prior to this change, 1.6 per cent had been rated for aviation, either by extra premium or by exclusion rider. He believed that well over one-half of the aviation group had been moved to the standard classification by his company's recent changes. Assuming that 2 percent of his company's standard business were to be written on these aviation risks, and that the mortality experience were to be 150 percent of standard, the effect would be to raise the over-all mortality of all standard business by one full percentage point. Allowance for a younger age distribution would decrease this, but the actual experience might well prove to be above 150 percent, particularly at the younger ages. He concluded that the aviation changes which have been made are of much greater significance than the occupational liberalizations.

With respect to risks with permanent ratings for medical impairments, Mr. Morrison calculated that, if all risks rated in the first two classifications (135 percent and 150 percent) were moved to standard, and if the actual mortality followed the rating classification, over-all standard mortality would be increased by about 2 percentage points. Similarly, if all insurable risks had been accepted standard under the same assumptions, the over-all mortality of the company would be increased 7.4 percentage points.

This latter result is confirmed in part by his company's actual experience during the past three years. Comparing total mortality with standard alone, total experience was higher by 7 percentage points at durations

1 to 5, and by 8 percentage points at durations 6 to 10. Beyond the 10th year, however, the total was higher by one percentage point only. Actual claims in this study aggregated $24 million.

The liberalizations made to date for occupation will have only a very minor effect on his company's standard mortality. The aviation changes, likewise, will not materially alter the total results, provided the volume of business continues at the level of the past. With respect to medical impairments, consistency suggests the waiving of medical extras at the younger ages where the gross extra premium does not exceed some minimum of, say, $2. The effect on the company's total mortality of such a practice would again be minor. On the other hand, to broaden the standard class by accepting risks at all ages rated up to 150% would result in a significant increase in the company's mortality.

MR. J. E. HOSKINS said that there are two implications in the question in section B: (1) that the aviation death rate of pilots has decreased and (2) that the aviation risk of the average policyholder has increased as flying has become more general. It is, of course, the excess of the risk in a given special class above that of normal lives which gives rise to extra premiums.

As to the second point, if all civil aviation deaths were related to the number of Ordinary policyholders, the risk of aviation death whether as pilot or as passenger would be covered by an annual premium of not over $0.02 per $1,000. Therefore, even with the general increase in flying, practically all of the aviation risk of a pilot is extra hazard above that of the normal policyholder.

As to the first point, it is generally agreed that some theoretical extra premiums can be waived, although the limit of such standard acceptance is a matter of individual judgment. If we confine ourselves within those limits where there probably would be general agreement that the theoretical extra premium could be waived, Mr. Hoskins believes that less than half of the exposure in the intercompany aviation experience is in classes where the aviation death rate is low enough to justify standard insurance.

Since civilian pilot certificates in the United States run indefinitely, the number of active pilots is somewhat less than the number of certificates in force. Estimates of the number of active civilian pilots range from 60,000 to 350,000. The number of civilian pilot deaths has recently been running about 350 a year. If there are as many as 350,000 active pilots it could literally be true that a majority of them have so little extra hazard that they could be granted standard insurance. If the number of active pilots is nearer the lower estimate, this probably would not be so. In either event, those pilot classes whose extra risk is within generally accepted limits of standard acceptance are already being granted standard insurance under the underwriting rules of many companies, except perhaps those who have been flying so short a time that they cannot be classified satisfactorily.

The physical examination given to pilots is not materially more stringent than the customary insurance examination as to those factors which affect longevity. They do go more deeply into eyesight and things of that sort. A group of recently examined pilots should have the same select mortality as a like group of recently examined insurance policyholders. As times goes by, some of them are going to become impaired and no longer be permitted to fly, but they still remain insured. Therefore, a low natural death rate among pilots does not imply a low rate, over the period of a policy, among a group who were pilots at the time of application.

It may be argued that if standard insurance were granted to most civilian pilots, the absolute amount of loss would be so small that it could be overlooked. In The Travelers, in the five months since offering standard insurance to some pilot classes, the sum of the annual extra premiums imposed on civilian pilot applications which still are ratable has amounted to about $5,000, or at the rate of about $12,000 per year. Moreover, it seems likely that many more such applications would be received if his company were to announce that practically all pilots would be accepted standard. In this same five-month period The Travelers received approximately five times as many applications in the classes they are now taking standard as they received in the previous five months. He thinks it probable that the announcement of standard insurance for a class previously rated impels agents to seek out applicants in that class and also reduces the sales resistance of those solicited.

If 300 of the approximately 350 annual pilot fatalities had taken out $10,000 Ordinary insurance apiece, the additional death claims in a year, namely $3,000,000, would increase the amount of Ordinary death claims for all companies by about 0.2%.

Mr. Hoskins said there is the question of why the industry should assume a financial loss by charging certain classes of pilots less than is needed to pay their claims.

MR. G. T. PRENTICE said that recently the Imperial Life of Canada had revised its extra premiums for occupational hazards. Where the extra premiums amounted to $3.00 or more per thousand, there were practically no changes. About half of the classes which formerly required an extra premium of $2.50 had the extra increased to $3.00. A few classes requiring extra premiums of $2.00 per thousand had these raised to $3.00. The remaining classes are no longer charged any extra premium.

Several considerations led to this change. There were enough cases where differences existed between the practices of companies to be disturbing to his field force. Although there is little up-to-date experience on mortality by occupation, he believes that safety measures and campaigns have resulted in decided improvement in the accident rates in broad areas in industry. It is likely that the improvement in the living standards of industrial workers has resulted in relatively improved mortality amongst them. The average policy requiring the occupational extra is about half of the average size for the company; this resulted in a relatively low extra premium per over-all average policy.

This action reduced the number of cases for which occupational extra premiums were charged to one-third the former number. He believed that the remaining extra premiums were realistic and involved areas where improvement in mortality would be more difficult to achieve. Each company has a right—and conceivably a duty—to make an appropriate charge in all cases where a definite extra mortality risk exists, whatever the cause may be.

Mr. Prentice estimated that the change in occupational extra premiums might result in a reduction in premium income of about $20,000 or 1% of net death loss.

MR. A. P. MORTON said the cost of underwriting had increased with the increased salaries to underwriters and the increased overhead all along the line. In making fine distinctions underwritingwise a point can be reached beyond which it is not economical to go. He felt that that point was probably reached some time ago in a number of the refinements of occupational underwriting. On the other hand, even with automation or with anything else, the working conditions of steeplejacks, for example, have not improved greatly in recent years, so there is always need to do some occupational underwriting.

Mr. Morton thought that in some underwriting—perhaps aviation is the most flagrant example—the companies decide what they want to do and then find reasons for doing it.

Mr. Morton thought it obvious the industry could not afford to offer a price that is so obviously below the true cost of insurance that people are foolish not to buy twice as much as they can really afford. He also thought that there was a difference between liberality in attitude and abandonment of the art of underwriting.

MR. MARCUS GUNN thought that the work of training agents was complicated by the tremendous turnover of even the best selected ones. Therefore, he leaned in the direction of greater simplicity for agents by eliminating occupational ratings so far as possible.

MR. E. S. JACKSON thought that a great improvement could be made in the treatment of occupational hazards. A great deal of time and money is spent in classifying predominantly small-sized policies without reliable statistics to justify the rating. All that is known is that, in the aggregate, the extras are too high for the extra mortality experienced. Mr. Jackson said that, also, much time and money is spent writing to branches and policyholders trying to defend the actions.

A year ago, the Manufacturers Life drastically revised its occupational manual, reducing it in size from 59 pages to 4 pages. They deleted all occupations which they couldn't rate $3 per thousand. The remaining occupational classes were grouped in broad categories, at the same time reducing many of the extras. The elimination of a large number of small extra premiums made worth-while savings in expense. This was particularly advantageous because the average size of this class of policy was quite small.

The establishment of broad groups was based on the lack of sufficient statistics to make smaller and more accurate classifications, and produced expense savings.

Expense savings arose from a more streamlined handling of policies. Inspection reports were eliminated. Correspondence over occupational extras was substantially reduced. Not-placed business was reduced.

Mr. Jackson felt that the elimination of occupational extras from small policies should be counterbalanced by simplified handling and by charging a higher rate of premium on all small policies.

If disability waiver and double indemnity benefits were to be rated for persons whose insurance, previously rated for occupation, was now standard, much of the advantage of simplification would have been lost. Therefore, his company considers persons who are occupationally standard for insurance standard also for these benefits.

With regard to section B, Mr. Jackson believed very different considerations from section A were involved. The average size of policy with an aviation hazard tends to be quite high. The statistics on aviation risks are extensive and up-to-date. As a result, competition has already forced companies to quote extra premiums which have smaller margins for contingencies and expenses than practically any other substandard risk.

With regard to section C, Mr. Jackson believed a company should ignore at least the same amount of dollar extra for medical impairments as for aviation and occupation. For quite a number of years, the Manufacturers Life has ignored permanent medical extras of less than $3.00 per thousand per annum, and temporary extras that total less than $15.00 per thousand (*e.g.*, an extra of $3.00 per thousand payable for 4 years would be ignored).