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DIGEST OF DISCUSSION OF SUBJECTS OF SPECIAL INTEREST

ELECTRONICS

Role of the Actuary in Electronic Data Processing

Has the Actuary remained close enough to Electronic Data Processing developments? What is likely to be the permanent role of actuaries in this field? How much does this permanent role depend on the operations being performed by the computers?

MR. RICHARD H. TALLMAN opened with a brief discussion of the development of electronic data processing in Northwestern National Life. The Actuary was represented on the senior electronics committee, an actuarial man directed the working group, and people with actuarial background did a considerable amount of the work. In addition, actuarial students have spent some time programming applications. As a result, Mr. Tallman felt that the Actuary in his company has remained close enough to E.D.P. developments. He then went on to point out that since the principal applications dealt with accounting and insurance operations, the person in charge of these operations need not be an actuary but might well be someone from the operating departments. In his company the chairman of the senior electronics committee is the company's Comptroller.

MR. J. BRUCE MACDONALD expressed the thought that electronics is a highly specialized field and many actuaries can hardly hope to be well acquainted with it, just as many are not too well acquainted with other specialized fields like Group, A & H, underwriting and the like. On the other hand, he felt that actuaries are naturally attracted to this field and there will always be some actuaries active in the development or use of electronic data processing equipment. As to the permanent role of actuaries in this field he felt that there will always be some who are intimately involved, while others, with a more general understanding of the capabilities of the equipment, will serve in an advisory and a supervisory capacity, making sure the system serves the company and not the company the system.

MR. JOHN C. DAVIDSON first traced the development of punch card equipment as used in life insurance companies, pointing out that these were generally first used by the Actuary and were generally under his control. Now with the advent of electronic data processing equipment a

greater consolidation of operations may be carried out and the Actuary of the company will probably not have direct control of the system. As a result, the Actuary will feel more removed from actual operations than in former punch card installations.

In discussing the role of the actuary, Mr. Davidson discussed three types of actuaries. First, was the Actuary of the company. He felt that it was inevitable that the Actuary should fully comprehend the tremendously greater capacity available in present day equipment, mentioning in particular the speed, versatility and increased accuracy. On the other hand, he should also be aware of the expense and time required in using this equipment for one-time jobs.

The second group of actuaries were those responsible to the Actuary of the company. Mr. Davidson felt that they should be exposed to programming and actual computer operation and hence have a greater understanding as to the feasibility of proposed actuarial applications.

The third group consisted of those actuaries directly associated with the electronic installation. He felt that if an actuary could be found who was a good administrator, coordinator and one who could implement a long and difficult task, he would probably be the best person to head up an extensive electronic program.

In addition, there should also be other actuaries involved in the many phases of planning and programming of the actuarial routines included in the electronic systems, this being the best way to insure that the Actuary's wishes were being carried out properly.

In summary, Mr. Davidson concluded that it was necessary to have the electronics organization interlaced at various levels with actuarial talent, and hence they have a key role to play in current and future developments.

MR. BRIAN L. DALY felt that since the major use of electronic data processing equipment is in the area of policyholder service and the mass premium and commission accounting, maybe the Actuary need not be as close to electronics as previous speakers had indicated. He raised the question as to whether an extensive use of actuarial talent in this area was really necessary. Is there enough actuarial talent coming along so that they can all be put to work in an E.D.P. area? He pointed out that Penn Mutual's experience has proven that nonactuarial people can also become quite successful in this area.

In conclusion, Mr. Daly said that perhaps the Society had taken the proper role so far in actively studying the fundamentals of electronic work, but leaving to the I.A.S.A. and L.O.M.A. the job of coordinating what people have worked out in the way of practical operating situations. He

pointed out that holding electronic sessions at Society meetings would exclude competent electronic people who were not actuaries, but at similar sessions of these other organizations actuaries as well as nonactuarial people could attend.

MR. C. NORMAN PEACOR stated that a new concept of data processing has begun to emerge with less emphasis on calculation and more on the processing of data. As a result, the use of this equipment calls for an extensive planning effort, and it does not make much difference whether the planning is performed by an actuary, controller or someone actually in the planning department. On the other hand, he felt that if the Actuary was going to make this planning effort he would have to guard against using the equipment largely as a calculating machine.

MR. J. STANLEY HILL also questioned the wisdom of pouring actuaries into electronic data processing. In spite of this, he said that the entire E.D.P. program in the Minnesota Mutual is under the direction of the Actuary, that for programming special actuarial projects actuarially trained people were the only ones that proved successful, and that all actuarial students are given programming training.

In conclusion, Mr. Hill felt that the Actuary should view this new equipment as part of the modern tools of his profession and try to develop new products and techniques which are particularly suitable to electronic administration.

MR. WALTER L. RUGLAND also felt that there was danger in assigning too much of a scarce commodity, actuarial talent, to the electronic program. In his company, Aid Association for Lutherans, they have been able to do the actual work with a minimum of actuarial people. As to the permanent role of the Actuary, he felt there might be some danger in having the Actuary become too much of a slave to the machinery. While actuaries are needed to follow very carefully the results, they need not have an intimate knowledge of how these results are obtained from the machine. Actuarial talent should be saved for developing problems and analyzing results, rather than putting the problems through the machine.

MR. FRED W. HAMM recited the complexities of handling the two retirement systems in the city of Detroit. Since the Actuary's work is likely to increase and become even more complicated, it will be desirable and even necessary to transfer his work to these computers. As a result, the Actuary should keep himself well informed on developments in this field and his role is likely to expand into the problems of other divisions in his organization.

In conclusion, CHAIRMAN CHARLES G. GROESCHELL raised the question as to whether electronic data processing would ever become a part of the Syllabus of one of the actuarial examinations.