TRANSACTIONS OF SOCIETY OF ACTUARIES
1951 VOL. 3 NO. 6

WAR PROBLEMS

A. 1. What minimum program of duplication, microfilming and remote storage of records is prudent to guard against the hazards of complete destruction of a Home Office?

2. How could the Home Office operations of a life insurance company be spread out geographically to minimize disruption due to war?

B. In the event of warfare *on this continent*, would the hazard of such a magnitude be bearable (a) by individual companies, (b) by the industry with suitable pooling of risks?

MR. F. E. RATHGEBER discussed the steps to be taken by the Prudential to guard against the hazard of complete destruction of the Home Office. Their program includes microfilm, I.B.M. reproduction, photostat, and even extra carbons of some records. Another segment of the program involves actual dispersion of records without additional duplication.

All stocks and bonds, mortgage papers and Secretary's minutes are stored in protected vaults in Newark. Lists of their securities as well as complete copies of all Secretary's minutes are microfilmed and sent to a bank vault in a small town in Pennsylvania.

Policy loan certificates are kept in fireproof cabinets. Microfilms of these certificates are sent to a bank vault outside of the state.

The punch cards used in their Ordinary policy billing and accounting will be duplicated. By establishing this duplicate file and furnishing duplicate copies of transaction cards they will be in a position to handle billing, valuation and commission work upon very short notice. Their policy register will be microfilmed at intervals but will not be maintained on a current basis. They do not plan to duplicate any portion of their application files.

The punch cards used in their Debit policy accounting system are to be duplicated. The Life and Lapse Registers over six months old for their debit policies will be sent to a Records Protection Office in Scranton. Reference to these registers will be performed by direct teletype.

Protection of their Group insurance records will be accomplished by using almost every possible method of duplication from microfilm and photostat right down to the Bruning process. Facility and cost are the prime factors in determining the method to be used. Basically, the program calls for reproduction of every one of the major Home Office records. They will rely also upon employers' records on their larger Group cases.

It is their plan to microfilm all canceled checks upon receipt to provide immediate protection. Four months later they will remicrofilm in the permanent file sequence all canceled checks except those on which there is practically no back reference. An extra copy of all check register sheets will accompany the microfilms to their Records Protection Office.

All procedures involved in setting up these protective records, and instructions for their use in case of a catastrophe, are being prepared and stored in each of the Regional Home Offices of the Company.

The Prudential's program of decentralization has helped (1) to aid their records protection program, (2) to reduce the huge concentration of personnel and records in any one place, and (3) to provide a training ground for men in all aspects of the Company's business.

MR. G. G. MYER posed the questions: At the very worst, of what use is a lot of duplication, microfilming, etc., if a company's assets are entirely destroyed? At a somewhat brighter level, assuming a reasonable proportion of assets left, what are the chances of actually making use of these duplicated records if your staff and machines are proportionately destroyed? He did not have the answer to these questions, but he outlined the procedure to be followed by the Confederation Life. In addition to microfilming bond and stock holdings, details of group annuities, etc., they will make a copy of their dividend and premium bases books which they propose to store along with one copy of each of their old and current rate books and one copy of each form used.

MR. H. M. SARASON prophesied that the next all-out war *will* be on this continent, to the extent of a few atom bombs, at least, and we might as well prepare for the worst.

It will be some time after the start of the war before we know whether our funds will be adequate or not—and it will be inequitable to exhaust the funds on a first-come first-served basis. On the other hand, it will work a tragic and unnecessary hardship to make beneficiaries wait several months before they receive a dime. Probably our funds should be paid out as beneficiaries establish their needs for funds.

The mere mention of the word "needs" after the atom bomb falls brings us to a radically different line of thought, Mr. Sarason pointed out. What are the most radical steps insurance companies may take to meet the needs? Mr. Sarason answered this question by stating that the most radical thing insurance companies might do would be to use their funds for welfare purposes, but that some intermediate course would probably be advisable.

Mr. Sarason predicted that transportation to and from rural areas will be in great demand. Essential supplies will be in great demand, especially in areas near cities, but not too near.

The best investment for some of our funds is in "securities" which will be highly marketable and, in fact, will "mature" just when they are needed most. These "securities" are used automobiles, trucks and buses, gasoline, worn clothing and blankets, food, medical supplies, etc., all stored strategically, some in caves, not too near cities, and all across the country. Mr. Sarason asked whether this was too radical to swallow without chewing and pointed out that people scoffed at Noah for building the ark. His challenge to each of us who has anything to do with our atomic planning was the Biblical question: "Who knoweth whether thou art come to the kingdom for such a time as this?"

MR. H. G. JOHNSTON related the experience of the company with which he was connected in England during the last war. They had for some time before the war in 1939 stored their records in various parts of the city of London. A duplicate set of their policy cards was stored in a building apart from the Head Office building. Just before the war they moved half the Head Office south of the city and the other half north of the city some twenty miles.

The southern half received a direct hit from a stray German aircraft—the records were completely destroyed. Furthermore, all the applications, housed in a separate building in London, were destroyed by the fire in 1941.

Mr. Johnston said they didn't have very much trouble operating after that. It is surprising what you can do when you are faced with the problem.

MR. ARTHUR PEDOE believes that the introduction of the atomic bomb into modern warfare means that the war hazard where life and property are concerned cannot be covered by insurance companies. Without knowing it or accepting the obligation, governments are reinsuring the losses due to atomic warfare.

Any statements by life insurance officials that the industry can act without the government is unrealistic. The dollars payable under a life insurance policy are claims to property and services. In times of atomic warfare these claims will rest absolutely and entirely with the government. This is why Mr. Pedoe considers futile any movement by companies to cover the atomic bomb hazard by grouping themselves for mutual protection on the grounds that they thereby prevent the intervention of the government. He asked why free enterprise is incompatible with a government fulfilling its function and obligations in a time of national disaster.

The normal death rate per annum is about five per thousand dollars of insurance in force. Weighing surplus after depreciation in asset values caused by a national catastrophe, such as the destruction of two or three of our larger cities, Mr. Pedoe estimated that death losses above normal of ten per thousand sum assured in force or a total death rate of three times the normal would mean insolvency to a large part of the life insurance industry.

MR. E. F. ESTES added two thoughts to Mr. Pedoe's discussion: (1) in 1932 government was not relied upon to pay our claims, but to get folks settled down and back in the business-as-usual frame of mind; (2) if we did have a type of national disaster that is suggested here, it is conceivable that the life insurance business could still pay claims—assuming we had any assets. Under such a disaster situation, the use of a legal yardstick of solvency might temporarily have to be abandoned, and government recognize the realistic situation that immediate payment of claims is of first importance, whereas meeting some standard of solvency that had been written into law may, for a time, be inexpedient.

MR. R. M. PETERSON commented on the thoughts and work of the Subcommittee on Pooling of War Risks of the Joint Committee on War Problems of the L.I.A.A. and A.L.C. It is the subcommittee's thought that each company would share the risks that go into the pool in proportion to its net amount at risk. Mr. Ray D. Murphy, Chairman of the Joint Committee on War Problems, had supplied arithmetical illustrations for distribution at the Society meeting. The subcommittee considered whether it was appropriate to ask for government aid, but they felt that the insurance companies should do all that they could on their own behalf to combat any losses from bombing. The program takes care of only limited catastrophes. Solely as an illustration, the order of magnitude of the losses to be covered by the pool might be in the neighborhood of five per thousand. The program contemplates three separate pools: one for group insurance, one for ordinary insurance, and one for industrial insurance.

The plan contemplates that it wouldn't cover minor events of war. The contingency might be defined as an act of war, say, where there were more than a thousand deaths—essentially civilian—in the home area of the United States and its possessions. One difficult problem is the determination of what deaths should be included. It has been suggested that the governing board might draw a circle around a bombed area and simply include all deaths that take place at the occasion of the bomb dropping or within three months afterwards.

The basic purpose of the pool is to equalize the strain on surplus and thus help to maintain the relative competitive position of each company. Pooling is concerned only with the net effect upon the surplus of the company as a whole. It has no necessary impact upon the surplus distribution practices for the various lines of business within the company. For example, a company would be entirely at liberty to leave the benefit of mortality profits within a group annuity experience fund or, as a matter of internal policy, to require some contribution from the group annuity branch to the group life insurance branch.

Mr. Peterson pointed out that the total amount of annuity reserve at risk will be quite small in relation to the total amount of insurance at risk, perhaps only two or three percent. Thus, the over-all effect of including annuities cannot be very significant. The net effect upon a particular company of including annuities in the pool will depend on many unknown facts: the relationship of the pool's insurance losses to annuity gains, the difference between the company's and the pool's rate of insurance loss and annuity gain, the difference between the company's and the pool's ratio of annuity reserve at risk to insurance.

Mr. Peterson said that his company would probably take a noncommittal position on the question of including annuities but his personal view was that there were no very compelling reasons for their inclusion.

MR. E. A. GREEN presumed the reason for three pools is to get a certain homogeneity of risk. Since pension trust and salary allotment business is concentrated in area like group business, and monthly debit Ordinary business is related to industrial, it seemed to him that more homogeneity might be attained by classification according to method of premium collection than by the annual statement classification. He also suggested that we must be careful not to fool the public into thinking that the problem of the atomic bomb hazard in their life insurance coverage was completely solved by any such limited pool as was apparently contemplated. He estimated that the suggested limit of $5.00 per $1,000 at risk might not be adequate to cover the losses resulting from the dropping of one or two atomic bombs on New York City.