COVERAGE AND UNDERWRITING ASPECTS OF BURGLARY INSURANCE

BY

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Like Gaul, burglary insurance is susceptible to division into three parts: the first, coverage for banks, the second, coverage for individuals, and the third, coverage for non-banking commercial enterprises. This paper will be confined to a discussion of the coverage, rate structure, and underwriting considerations involved in providing coverage for non-banking commercial enterprises, hereinafter referred to as commercial burglary. The omission of banks and individuals does not mean that these areas of coverage are unimportant, but it does recognize that, today, the major portion of bank coverage is written as part of an indivisible package which fidelity coverage controls, and that coverage for individuals is moving rapidly toward inland marine and multiple peril packages. Both of these latter subdivisions, bank and individual coverage, played a major role in the past, but this role has lessened substantially in the last 10 to 20 years, and there is no reason to assume that the trend will change.

That this is the first paper presented to the Casualty Actuarial Society on this subject is not surprising. Burglary, traditionally, is a casualty line and, as such, is a misfit. Except in three instances, it is two party property coverage, not third party liability coverage as is the preponderance of the casualty market. For this reason, it has been placed in a corner with glass insurance and other miscellaneous property coverages and is handled by people known as burglary and glass specialists. This is true even at the Rating Bureau level. As a result, people involved with workmen's compensation and liability insurance, the majority of casualty people, have seldom been exposed to burglary insurance because the relatively small premium volume supported relatively few specialists; moreover, because this small group did have special knowledge, a mysterious area has been created. In truth, burglary is not complicated, but it is different. Viewed by the uninitiated, it could be forbidding. We hope the following discussion will lessen the supposed mystery.

COVERAGE

The first necessary step is to understand the types of coverage provided by the various standard policy forms. Coverage is fairly standard throughout the industry with variations involving minor areas only. There are two major types of exposure, money and merchandise. Coverage for money in some cases includes coverage for other property (i.e. merchandise), but such coverage is incidental except for jewelers and furriers. The purchase of money coverages for the specific purpose of insuring property other than money is rare. Let us first consider money exposure.

A money loss can occur inside the insured's premises or it can occur outside. It can occur while the premises are open or when they are closed. If the premises are closed, the money is probably kept in a safe. In addition to the variation in location and time, the loss can be perpetrated in a number of ways: by breaking into the building or into the safe (burglary), by forcibly taking the property from its custodian (robbery), by sneaking the property away from the owner without the owner being aware of the act (theft), or by some other means which does not involve force and is not a voluntary surrender (disappearance). By mixing location, time, and manner of occurrence, we obtain all standard coverage.

The other major exposure, merchandise, is subject to the same location, time, and manner of occurrence variations as are applicable to money exposure. However, merchandise outside the insured's premises is ordinarily considered an inland marine exposure, and, to date, burglary underwriters have generally refused to offer insurance for the disappearance peril. Standard coverage for merchandise exposure is therefore limited to the insured's premises and to burglary, robbery, and theft perils. Mixing the three variables, location, time, and manner of occurrence, again produces standard coverage. The various possible combinations with accepted policy names are summarized as Exhibit I.

A student of coverage might well view the foregoing and ask, "If standard coverage is a combination of three variables, and if there are two types of exposure, why have I studied a dozen policies? Why not two or three?"

It is true that three basic policies would suffice; the Mercantile Open Stock Policy with the Theft Endorsement would cover the merchandise exposure and the Money and Securities Broad Form Policy, or the Mercantile Robbery and Safe Burglary Policy would cover the money exposure. Unfortunately, many special combination burglary policies have been created. Policies including fidelity and forgery are common; fringe coverages are sometimes included; coverages and limits of liability are packaged for particular types of risks. Competition has forced industry acceptance of some of these specialities, but if the student cuts each policy back to its basic concepts, he will find that the burglary coverage falls into the pockets indicated in Exhibit I. Exhibit II demonstrates this approach for all standard commercial burglary policies.

In 1956 the Mutual Insurance Rating Bureau promulgated a policy which offers, on an optional basis, all major commercial burglary coverage. This policy, with such additional fidelity and forgery options as individual companies chose to make, effected a standardization for Mutual Bureau members and provided a means of eliminating six policies. About the same time, the National Bureau of Casualty Underwriters promulgated a Special Coverage Policy and coverage forms enabling its members to eliminate a number of minor policies as well as the recognized commercial buglary policies in favor of a single jacket. This program was also adopted by the Mutual Bureau. This type of action does much to remove the mystery and confusion of buglary coverage, as policies are eliminated and coverages are consolidated in a simple, logical fashion. The industry will benefit most from public acceptance, which will come only with understanding. We suggest making the single, simple approach mandatory rather than optional as at present.

It is evident from Exhibit II that the number of policies results from combinations of the time, place, and manner of occurrence variables shown in Exhibit I. Policy nomenclature varies by company. Some companies have additional policy or coverage combinations, arranged to serve a particular need. The only limit on the number of different policies is expense and the administrative difficulty in policy issuing units. This alone has started a movement for simplification and consolidation that may in time substantially reduce the number of policies offered.

Any attempt to codify insurance coverage, as in Exhibit II, necessarily overlooks minor variations and concentrates on major intent. It would seem in order to point out some peculiarities of burglary insurance as follows:

1) Most burglary policies contain broad ownership provisions extending coverage to property held by the insured in any capacity, whether or not he is legally liable for its loss.
2) Although fidelity may be included as a separate insuring agreement in some combinations of coverage, a burglary insuring agreement will generally exclude coverage for acts committed by employees unless such act is one of force (robbery or forced entry).
3) Policy provisions generally reduce insurance if agreed protection does not exist at the time a loss occurs. The Mercantile Open Stock Policy and Safe Burglary Policy may void insurance in some cases.
4) Typical exclusions eliminate coverage (1) unless a loss can be documented, (2) for war risk, (3) for the intrinsic value of printed material and (4) for property of the United States Government.

RATES AND RATING

Most commercial burglary policies produce small premiums averaging less than $100 annually. With the exception of the low-limit of liability packages, each coverage must be separately rated. Since normal exposure includes money inside the premises, money outside the premises, and merchandise, there are three separate rating operations. Since classification of business and territorial assignment vary by coverage, at least two facts must be determined for each coverage. Let any of the sixteen possible protective devices exist, and you have a Chinese puzzle. Expand this for a multi-location risk, and your computation takes on the appearance of the application of the Dean Analytical Fire Rating System for a multi-story, multi-occupant building. The possible rate variations are set forth in Exhibit III.

Jurisdiction over burglary rates and forms is exercised by the National Bureau of Casualty Underwriters and by the Mutual Insurance Rating Bureau for their respective memberships for most states. The two bureaus determine rate levels and differentials for the various states. A number of companies act independently for these lines of insurance but their rate levels and rating procedures generally follow the bureau's programs. Bureau rate-making generally proceeds as follows:

Territorial schedules are set up, much in the manner of the National Automobile Underwriters Association. This means a $26 schedule, a $28 schedule, and so forth, with no thought as to which state belongs to a particular schedule. Differentials between schedules are rounded to quarter dollars and are generally less than 120% of the preceding lower schedule. Areas are assigned to schedules according to past experience (with adjustment for credibility), and if a large territory (premiumwise) indicates need for a special schedule, one is set up. This operation is performed for each sub-line of coverage. Rate revisions are made at irregular intervals and more than one year of experience is used.

Although this procedure produces right answers for existing geographical divisions (ones for which statistics are obtained), it does not permit refinement or subdivision of existing territories according to the actual experience of the area. This is questionable if one considers the size of territory involved. Massachusetts is divided into 4 parts: Norfolk, Suffolk, and Middlesex counties, and remainder of state. New York is divided into 11 parts, 7 of which are greater New York City, the others being Buffalo, Rochester, Syracuse, and remainder of state. Twenty of the 50 states have only one territory, and the remaining 30 average only 4.1 territories per state or 3.2 territories if New York, Texas and Virginia are excluded. A city like Worcester, Massachusetts, with a population of 200,000 carries the same rate as isolated Nantucket Island. Albany and Binghamton have the same rates as an Adirondack hamlet. Middlesex County, Massachusetts, includes densely populated Cambridge on the fringe of Boston and Tyngsboro on the New Hampshire Border.

Such territorial problems as outlined above exist in all types of insurance. In a low credibility line, the cure could be worse than the disease. Some will argue that no cure is necessary because the volume in the affected areas is so small. However, if the possible inequity was removed, volume might increase appreciably. It is true that other rate variables enable the underwriter to offset, to some degree, territorial faults, but it does not seem proper to leave a known variable to underwriting judgment.

Class of Business, Type of Safe, Limit of Liability

In 1948, the Statistical plans coded these items for the applicable lines of coverage. Under Mercantile Open Stock, Safe Burglary, and Interior Robbery, the actual business of the insured was coded rather than the broad rate classification. By 1951, Limit of Liability codes had disappeared, and the business codes were consolidated into rate classification codes. In 1954, classification coding was suspended and the present practice of coding to policy form only was adopted. Since classification assignments have changed since 1954, it appears that judgment has the upper hand in some of the present differentials.

The availability of credible statistical data in a small volume line, such as burglary, will always be a problem if one thinks in terms of dollars of loss and dollars of premium. Units of exposure are as difficult to measure in this line as they are in the fire line. Burglary might well be thought of as a fire line with limited volume. Although it might be considered actuarially crude, a rough check on differentials and relativities could be developed from a simple count of number of insured locations and number of losses. Use of frequency figures of this type overlooks severity and is deficient in this respect, but it would seem that reasonable credibility could be achieved more easily if the wide variations in size of loss were eliminated. Perhaps the result would be no better than a rough guide, but even this should be of value. Of course, the availability of such figures would depend upon coding of the relativity to be measured.

Judgment has a valuable characteristic; it permits instant action. As supermarkets grew bigger in the early 1950's, the concentration of cash presented one of the most desirable burglary and robbery targets ever known. When a scarce supply of small, heat-treated tools existed during the Korean War, a wave of burglaries occurred. Both of these situations were new and different and required action that would have been impossible or greatly delayed under a pure statistical system. However, the drastic action taken hinged on the alertness of a few underwriters, and once the action was taken and time had passed, the question arose as to whether or not any adjustment should be made. With regard to supermarkets, no, for the cash target still exists; but do the taps and dies belong with sporting goods and pens in the highest classification under normal supply and demand conditions? Is judgment classification a one-way street, easy to go up but difficult to come down?

Protection Variables

These variables include Guards, Alarm Systems, Watchmen, Tear Gas, Division of Insurance, Special Cages, Private Conveyance, Relocking Devices, 24-Hour Operation, Messenger Bags, Inside Routes, and Two People on Duty. No recent statistical data have been obtained in this area. Since the value of protection must be expressed in terms of losses avoided or reduced, statistical data are unobtainable except as a comparison of the experience of protected and unprotected risks with regard to both frequency and severity. To the best of our knowledge, this has not been done in recent years. Percentage credits have been established as an estimate of the degree that exposure is reduced by specific protection. This leads to some difficulty in that the specific definition often prevents adequate protection from qualifying for credit. An ingenious underwriter can, in some cases, reduce this problem by persuading the risk to fulfill the deficit or, where permitted, by allowing schedule credits reflecting his own estimate of the existing protection. Frequency figures comparing protected and unprotected risks would be an aid to the underwriter. This is particularly true with regard to guards, watchmen, and alarm systems, since the other types of protection exist infrequently or are of little importance.

Second Exposure

Burglary risk rating provides for a discount to be applied to the premium computed for all locations except for the primary location. This discount is limited to money coverage and is 10% for inside exposures and 50% for outside exposures. It would appear that the discount recognizes expense savings derived from the issuance of a single policy to a multi-location insured. The saving may be overstated since a manual premium for each location must be computed and then discounted so that there is no saving in the rating operation. There is saving in the policy issuance, accounting, and general administrative functions. The 50% credit for outside money exposure probably anticipates control of severity of loss by virtue of divided exposure. This makes sense if one sends two messengers to the bank, each carrying half the exposure. However, if one messenger is in Boston and the second in New York, there is no reduction in exposure. Actually, if we pursue this avenue, the way to control money exposure would be to increase rates as limit of liability increases. This is not suggested in jest. Probability of loss and size of exposure appear to have a logarithmic relationship. The present system does not reflect this accelerated increase and requires that the underwriter institute protection designed to produce a one-for-one relationship.

The foregoing discussion is not intended as a criticism of the Bureaus. In 1954, some of the relativities used, other than territorial relativities, dated from 1927. Action since 1954 indicates that a thorough review of all relativities has been made. New classification groups have been set up to permit greater refinement. Existing relationships have been modified. However, the basis for such action must rely largely on judgment, for as a state examiner said in 1954:

> "Although we do not wish to belabor the point, it is evident from a perusal of the latest classified experience countrywide for calendar years 1947 to 1951 that rates generally for the listed manual classes of these coverages are based on a premium volume too small for credibility."

Perhaps an indication of the relative volume of commercial burglary insurance is in order. Exhibit IV shows 1956 calendar year earned premium volume for the National and Mutual Bureaus.

Although Exhibit IV omits data on California and Missouri, they are major states for burglary insurance. Inspection of the list of major states shows a common factor, concentrated centers of population. Concentrated population produces concentrated value, which in turn produces crime. Perhaps a sociologist could reduce the relationship to a formula, but it is obvious, however one explains it, that it results in burglary insurance by creating a need and desire to insure. Exposure alone will produce the need, but concentration of value and the resultant crime frequency are necessary to produce the desire. Each sensational loss produces a buying wave. Little losses produce neighborhood buying. Without a loss, only the large concerns or the more conservative people buy burglary insurance. It is often said that most insurance of this type is purchased by people with a demonstrated need, which results in adverse selection. In this line, lightning strikes twice frequently.

It is difficult to make rates for risks of this type, insurance limited to a large degree to accident prone people. Confuse the issue by recognizing the tremendous potential differences between individual similar exposures, similar in location or similar in type of goods or similar in type of activity, but dissimilar in a hundred other ways.

Burglary rating attempts to solve or rise above the differences in exposure by combining territorial rating, classification rating, and protection rating with schedule rating and experience rating. This means that after all the variables previously described have been used to determine a proper manual rate, additional modifications reflecting the underwriter's evaluation of the risk and the past experience of the risk may be applied.

The experience rating plans merit comment. In New York the Bureaus use a plan with the following basic elements:

1. Premium subject to experience rating is that premium produced by the first $20,000 of coverage per location.
2. The period used for experience rating is the two years and nine months ending three months prior to the effective date of the rating.
3. Eligibility for experience rating requires $4,000 of premium subject. (Plans used in other states vary and have lower requirements with regard to premium subject).
4. The dollar value of a single loss included in a rating is limited to that dollar amount which produces a 50 point change in modification. Assuming a minimum risk with a two-year nine-month premium of $4,000, we find that the maximum single loss permitted is $3,283. If there were no losses during the period the risk would receive a 29% credit. Inclusion of a maximum single loss would change the risk from a 29% credit to a 22% debit. A larger risk, with $10,000 premium subject would receive a 50% credit with no losses, or a 1% credit with a maximum single loss of $4,651. A jumbo risk with $30,000 premium subject would receive a 75% credit with no losses, a 26% credit if there was a maximum loss of $9,300.

If we consider the middle size risk and the fact that a loss remains in the rating for a three year period, a maximum single loss is returned to the carrier through experience rating approximately dollar for dollar in that with a $4,651 loss, the premium which would have been $5,454 for the following three years becomes $10,800. From the buyer's standpoint, the action of this plan may seem extreme. From an underwriting standpoint, salvage of limited losses through experience rating is justified since the true area of insurance is the area in excess of the dollar loss limitation. The problem stems from the wide variations caused by a single loss. While it is true that the use of experience rating plans encourages risk improvement and prevention or protection, premium swings of the magnitude cited resulting from a single occurrence must provoke serious questions with regard to the value of insurance and the methods of insurance companies in the buyer's mind.

UNDERWRITING

Since rates are not made by development of loss and exposure data, underwriting judgment is of more importance in this line than in other casualty lines. Since most compulsion to insure reflects known loss potential and since a very small portion of the total exposure is insured, the underwriter can perform a real service to his employer by carefully selecting the standard of risk he accepts. There is enough freedom in the rating system to permit correction of minor manual excesses or deficiencies, if they are recognized. There is tremendous potential in the physical improvement of risks or loss prevention available to the underwriter who leaves his desk and looks at his risks. And then there is the gem which the texts refer to as "moral hazard."

The foregoing are generalities. Here are some specifics that illustrate the thought processes that become second nature to an experienced burglary underwriter.

1. A county may or may not be a homogeneous area. If it is not, a better result should be obtained by concentrating writings in the less congested areas.
2. Some types of retail business operate late at night, and generally these classifications reflect an increased charge for money exposed to robbery. A better selection of risks will result if the underwriter concentrates on those risks with shorter than average business hours for these classifications.
3. Merchandise classifications are generally based on the finished product in its normal form. Variations in form may change the relative hazard to loss. Thus, costume jewelry varies with the raw material, gold, silver, or no precious metal. The brass screws for earrings or the brass nose of an artillery shell contains hours of machine work. The potential loss is not pounds of brass, but brass plus labor and overhead, even though the burglar steals brass.
4. Loss potential of merchandise varies with size of package, value, and market. A shortage (real or artificial) will make an otherwise undesirable product a burglar's dream. A market surplus will render a normally hot item relatively harmless. Therefore, the underwriter should be constantly advised as to the supply of and demand for the product he insures.
5. There is more to manufacturing than the finished product, and more to protect. Raw material, scrap, machinery, and fixtures may generate as much or more exposure than the finished product, and these other items are usually less protected. In costume jewelry, the raw material always represents more concentrated value than the finished product. It is difficult to steal an airplane, but the parts and scrap aluminum are most attractive. Our friends on the outside have flexible desires, hate to leave empty-handed, habitually choose the path of least resistance, and are notorious for discovering new uses for materials.
6. Burglary policies include coverage for damage as a result of burglary. Although a safe may not contain money, this fact is not obvious until the door is open. If the office equipment or fragile merchandise gets in the way, the loss may be large despite a lack of money exposure. Damage potential should not be overlooked.
7. Although policy terms require records to substantiate the value of a loss, a great deal of grief can be avoided if the underwriter determines the existence of good bookkeeping and inventory systems at the outset. This may also bear on the moral desirability of the risk.
8. Physical conditions which permit one loss to occur generally indicate

a weakness which may be corrected. Analysis of the material stolen may indicate something new with regard to value or classification. The underwriter should profit, experience-wise, from every loss and should take such steps as are indicated to prevent repetition. Thus, one may learn that rhinestones are Austrian pearls and come from behind the iron curtain, or that telephone poles are as good as ladders if close to a building. Each physical fault can be corrected.

9. In addition to general area variations within a rating territory, hazard may vary by street and within a building. Certainly it is more difficult to obtain access to the 10th floor of a building than to the first, (provided there are no adjoining roofs). A building set back from the street is more prone to loss than one that fronts on the sidewalk. An alley is a more likely starting point than a well-lighted, heavily-travelled street. If the man next door operates 24 hours a day, his neighbor becomes a better insurance risk. The underwriter should use the burglar's outlook in evaluating the risk at hand.

10. Good underwriting sometimes reduces premium income. If you can convert a cash payroll to check, you remove a target, and the petty cash or day's receipts which remain are probably safer. An alarm system will receive a large protection credit, but many burglars will observe the alarm tape on the window or the sign indicating the presence of the alarm and not attempt entry. A burglar-proof chest may be purchased by a few years premium savings if there is a reasonable amount of cash exposure. Loss prevention in burglary insurance is often immediately rewarded by premium reduction, and if the cost of the protection is not offset by the immediate reduction, the prevention can often be sold on the basis of the effect of experience rating, if a serious loss were to occur.

More underwriting axioms could be recorded if we wished to probe deeper. Actually, such axioms are the application of common sense to a known problem. The rules become apparent as the underwriter gains experience. There is no special thought process or secret knowledge. The underwriter, like all underwriters, attempts to select the better-than-average risk, based largely on physical conditions and guided by a criminal outlook.

Of course, things do not always develop as planned. Since no burglary discussion is complete without a case history, here is a favorite: When requested to insure $50,000 of machined brass fittings in dead storage in an isolated country warehouse, the underwriter required that an employee visit the location each day, that certain arrangements be made for a regular state police check, and that the building be secured in such a way that entry would have to be made through the lighted front. The risk complied; the policy was issued. The underwriter successfully prevented a burglary loss, but unfortunately, the employee whose presence was required was lonely and brought a junkman along for company. The resulting fidelity loss probably exceeded the potential burglary loss. No matter how hard one tries, one cannot escape the problem—"Who watches the watcher?"

STATISTICAL PLAN

We have mentioned a number of areas in which we feel the current statistical plan is deficient, and a number of items which have been recorded in the past but are no longer obtained. The following is a description of the present plan:

Premium Cards

Identification number: This is the actual policy number assigned the risk.

Effective date: A three-digit code showing month and year.

Expiration date: A three-digit code showing month and year.

Policy form: A two-digit code indicating the subline of insurance involved, such as safe burglary or robbery inside the premises.

Classification: A four-digit code not currently used except for supermarkets.

Territory: A four-digit code showing state (standard 2 digit) and subdivision. The maximum use of the subdivision code is 11 for any one state.

Premium: Dollars and cents are recorded.

Loss Cards

Loss cards record the same data as premium cards with the exception of the effective and expiration dates and premium data. The following additional information is obtained:

Year of accident: A one-digit code.

Number of claims: A one-digit code to provide a means of keeping an accurate claim count for losses involving more than one payment.

Losses: Dollars and cents are recorded.

Analysis of loss: A one-digit code not currently used.

The usual provisions are made for company identification, entry date, and credit entries. Although a one card layout is used for premiums or losses, only 50 of the standard 80 IBM columns are necessary for the data required.

Separate cards are required for each policy form or subline for each rating territory. Thus, a multi-state, multi-location risk with several coverages would produce a number of cards but not necessarily a card for each location. If a risk had several locations on Manhattan Island, the premium for all such locations could be reported on a single card (for each policy form) since only one rating territory is involved.

Paid losses are reported as the payments are made. A call for incurred losses is issued once a year, 3 months after the close of the calendar year. Territory for losses would be that territory in which the loss was located or which produced the premium insuring the loss. (This is possibly different from the location of the loss since messengers go outside the premises).

RECOMMENDATIONS

Coverage

The trend towards fewer policies is admirable. The standard provisions program is a basic need. It should be encouraged. The number of special purpose policies should be reduced. All of this is welcomed, not just as an expense savings to the companies, but also as an opportunity to increase the buyer's understanding of his coverage.

To this end, we feel consideration should be given to a substantially new approach in presenting or arranging coverage, the approach demonstrated by Exhibit I. If a policy combining all standard coverage by type of property covered, by location of the property, by time, and by peril, could be set up so that the exact grant was indicated (perhaps more important, the grant not taken was indicated), the buyer would understand the product and there would be fewer disputes. Understanding and a straightforward all-in-one presentation should increase premium volume by making the product both easier to sell and easier to buy. This is not a suggestion that present coverage be altered, merely that it be re-arranged.

Another approach can be taken with regard to merchandise exposure. If a multiple peril approach, combining fire and burglary, is offered for contents coverage, it overcomes adverse selection. Other direct damage coverage could also be included. Thus, all normally insurable damage to contents on the insured's premises would be in a single policy, as is the case with the Jewelers Block Policy, the Manufacturers Output Policy, or the Commercial Property Floater. Such combinations are logical and, perhaps, inevitable and have been prevented or retarded only by the division of company authority, which existed prior to multiple line legislation.

Territorial Assignments and Differentials

The single rate with territorial multipliers used in Glass Insurance demonstrates the extreme variations (by street in New York) possible in property insurance. The fire rating of towns is another demonstration of variation. We would recommend an approach similar to that used for fire be applied to burglary insurance on a town basis. The formula should include consideration of density of population, concentration of value, an evaluation of police protection, and loss frequency. Rates for larger geographical areas, determined on the present loss ratio basis, could then be modified within the territory to reflect variations. Local, state, and federal statistics are available for most of the required information.

Class of Business—Protection—Limit of Liability

At the present time, no data of this type is coded (except for supermarkets); although provision is made for a four-digit code. Statistics developed in this area have tended to have low credibility in the past. Effective January 1, 1961, the Bureau Statistical Plan will be revised so that class of business and alarm systems will be coded for merchandise exposure. Class of business and type of safe will be coded for inside money exposure. This represents a major change. It is possible that statistics developed by this plan will lack credibility and, therefore, be inconclusive. We feel that it is possible that discounted figures, on a basis similar to workmen's compensation multi-split plans, giving heavy weight to frequency and discounting severity, could be used to advantage. If dollar figures prove inadequate, exposure and loss counts, or pure frequency figures would be of value.

The proposed statistical plan revision effective January 1, 1961, gives detailed recognition to class of business for the classified lines. It gives detailed recognition to alarm systems and to types of safe. It gives no recognition to watchmen or to the less important types of protection. It is possible that after a number of years of experience has been obtained on the new basis, the detailed statistical plan will be eliminated and the form codes which existed prior to this time will again become dominant. A statistical plan may be simple or complex. Even under a complex plan, we often fail to obtain all possible data. Attached, as Exhibit 5, is a suggested four-digit classification system to be used for all commercial lines of burglary which we feel would permit an over-all evaluation of the present rating system. This statistical proposal differs from the Bureau 1961 program primarily in that it obtains more data with respect to protection and less data with regard to classes of business. Our proposal classifies risks by rating group only and contains no subdivision of the various rating groups. In this respect it is less complete than the Bureau proposal. However, the subdivisions of classifications or rating groups could be incorporated into our proposal or could be obtained on a sample basis from the records of the larger writers.

We believe that the statistical handling of protection under the Bureau proposal is inferior to that suggested herewith. The Bureau plan calls for absolute detail on alarm systems and no data on the other types of protection. We sincerely question whether the detailed datum on alarm systems is warranted. Only a few high hazard businesses install alarm systems better than Class 3. Therefore, although the 1961 Bureau plan is well laid out, logical and complete, its productivity is doubted. It would seem more to the point to obtain data on the other common forms of protection, watchmen, and, if possible, an over-all evaluation of all protection. We feel that the proposal in Exhibit 5 provides such data.

This type of program, either the Bureau proposal or the proposal included herewith, requires substantial effort on the part of rating and statistical units. The effort may, in fact, be unwarranted. On the other hand, the effort is no more than that required prior to 1951 and, perhaps, is something less than that required prior to World War II.

A number of credits for miscellaneous protection are rarely used. Since schedule or equity rating is available in most states, both the rating system and the value of the statistical system would be improved by eliminating manual credits for this miscellaneous protection, and schedule credits at the discretion of the underwriter be substituted to recognize such protection.

The proposed statistical system, supplemented by voluntary samples or special calls to determine intra-class distributions, would not eliminate judgment in determining differentials, but it would lessen the dependence on judgment. It would produce data heretofore unavailable and open the frequency area for ratemaking and underwriting consideration.

Experience Rating

Because of the catastrophic nature of the line, the small average premium sizes and infrequency of expected losses, burglary insurance does not lend itself to experience rating except, perhaps, from a frequency standpoint. If the line is to be experience rated, the period used should be as long as practicable, and a sizeable portion of the premium should be set aside as a non-rateable element. Although this was not discussed in the statistical section of this paper, it should be noted that part of the statistical recommendation is to obtain limit of liability data. It is possible that such data would make possible actuarial studies leading to refinements of the existing experience rating plans.

CONCLUSION

There is no perfect rating system. In all probability there never will be a perfect rating system. Presumably, we attempt to produce the best possible answer consistent with insurance theory, expense considerations, and equality of treatment between risks insured. Perhaps the last consideration is the most important, since if we do achieve equality of treatment or fair discrimination, the rating system must be considered successful.

Our two basic ideas seem to be to simplify the system and lessen the importance of judgment. This in no way presumes the present system produces wrong answers. Simplification will ease the introduction of a statistical system, and the expanded statistical system will lessen the necessity for reliance on judgment. Desirable by-products would be industry and consumer understanding.

The schedule rating system applied to fire coverage on commercial building has in the past been subject to similar analysis. A detailed statistical system was investigated and not adopted. Possibly the statistical requirements of the plan were considered impractical. It is entirely possible that the same line of reasoning would be applied to Burglary insurance. The line is so small that it receives little actuarial attention. Requirements for credibility preclude the application of actuarial techniques standard to the Casualty insurance field. We have tried to avoid this pitfall by substituting use of frequency data rather than dollar data. Possibly this approach would effectively forestall criticism of the established rating system.

EXHIBIT I

POLICY SOURCE OF

MAJOR COMMERCIAL BURGLARY COVERAGE

	LOSS FROM PREMISES WHILE---			LOSS AWAY--
	Premises are Open	Premises are Closed	Property in Locked Safe	From Premises
LOSS OF MONEY				
Burglary	Loss Impossible by Definition	Broad Form Premises	Safe Burglary Broad Form Premises	Loss Impossible by Definition
Robbery	Interior Robbery Broad Form Premises	Loss Impossible by Definition	Loss Impossible by Definition	Messenger Robbery Broad Form Messenger
Theft	Broad Form Premises	Broad Form Premises	Broad Form Premises	Broad Form Messenger
Disappearance	Broad Form Premises	Broad Form Premises	Broad Form Premises	Broad Form Messenger
LOSS OF MERCHANDISE				
Burglary	Loss Impossible by Definition	Mercantile Open Stock	Mercantile Open Stock Safe Burglary Broad Form Premises	Loss Impossible by Definition
Robbery	Mercantile Open Stock with Theft Endorsemt. Broad Form Premises Interior Robbery	Loss Impossible by Definition	Loss Impossible by Definition	Messenger Robbery Broad Form Messenger
Theft	Mercantile Open Stock with Theft Endorsement	Mercantile Open Stock with Theft Endorsement	Loss Impossible by Definition	No Coverage Available
Disappearance	No Coverage Available	No Coverage Available	No Coverage Available	No Coverage Available

Burglary: Forcible Entry with Physical Evidence Thereof
Robbery : Forceful Taking - Fear or Threat of Violence
Theft : Unauthorized Taking - Custodian Unaware
Disappearance: Method of Removal Undetermined or Non-Human

EXHIBIT II

STANDARD POLICY COVERAGE

	From Open Premises					From Closed Premises						Outside Premises						
	Money			Mdse.		Money			Mdse.			Money			Mdse			
Name of Policy	Robbery	Theft	Disap.	Robbery	Theft	Safe Burg.	Theft	Disap.	Safe Burg.	Burglary	Theft	Robbery	Theft	Disap.	Robbery	Other Coverage	Fixed Lim. of Liab.	Comments
Mercantile Open Stock									Yes	Yes								
Mercantile Open Stock With Theft End				Yes	Yes				Yes	Yes	Yes							
Broad Form-Premises	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes									
Broad Form-Messenger												Yes	Yes	Yes	Yes			
Merc. Robbery-Inside	Yes			Yes														
Merc. Robbery-Mess.												Yes			Yes			
Merc. Rob.-Safe Burg.						Yes			Yes									
Paymaster Robbery	Yes											Yes						Limited to payroll funds
Storekeepers Burglary and Robbery	Yes			Yes		Yes			Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Minor Add'l coverage - package Limit of Liability in Multiples of $250
Storekeepers Broad Form	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes		Yes	Yes	Yes	Yes	Fidelity included - package Limit of Liability in Multiples of $250
Office Burglary & Robbery	Yes			Yes		Yes			Yes	Yes	Yes	Yes				Yes	Yes	Mdse. limited to Office Equipment package - Limit in Multiples of $250

EXHIBIT II Cont.

STANDARD POLICY COVERAGE

	From Open Premises					From Closed Premises						Outside Premises						
	Money			Mdse.		Money			Mdse.			Money			Mdse			
Name of Policy	Robbery	Theft	Disap.	Robbery	Theft	Safe Burg.	Theft	Disap.	Safe Burg.	Burglary	Theft	Robbery	Theft	Disap.	Robbery	Other Coverage	Fixed Lim. of Liab.	Comments
Fraud Policy	Yes			Yes		Yes			Yes			Yes			Yes	Yes	Yes	Fixed low limit package
Crime Protective	Yes			Yes		Yes			Yes			Yes			Yes	Yes	Yes	Fixed low limit package
Merchants Protective	Yes			Yes		Yes			Yes			Yes			Yes	Yes	Yes	Fixed low limit package
Church Protective	Yes			Yes		Yes			Yes			Yes			Yes	Yes	Yes	Fixed low limit package
Fraternal Protective	Yes			Yes		Yes			Yes			Yes			Yes	Yes	Yes	Fixed low limit package
Blanket Crime Policy	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes	Minimum limit $1,000, Theft of Office Equip. by Endorse.
Comprehensive 3D Policy	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes		
Innkeepers Legal Liab. Warehousemans Legal Liab.	These policies are legal liability policies and Burglary coverage is incidental to other perils.																	
Valuable Papers Policy	This is an all Direct Damage Policy with Fire consituting largest peril.																	
Accounts Receivable Pol.	Pays for inability to collect amounts owed because of destruction of records - Fire major peril.																	

EXHIBIT III

SUMMARY OF VARIABLES USED IN RATING

COMMERCIAL BURGLARY COVERAGES

Reason for Rate Variation

Subline	Territory	Class of Business	Type of Safe	Limit of Liability	Guards	Second Exposure	Securities Only	Excess Insurance	Alarm Systems	Watchmen	Tear Gas Systems	Merchandise Only	Division of Insurance	Special Cashiers Cage	Private Conveyance	Relocking Device	24-Hour Operation	Messenger Bag	Inside Route	2 People on Duty	Special Schedule	Total Variations
Messenger Robbery	x				x	x	x	x							x			x	x		x	9
Broad Form Messenger	x				x	x	x	x							x			x	x		x	9
Mercantile Open Stock	x	x		x					x	x											x	6
Safe Burglary	x	x	x			x	x	x	x	x	x	x	x			x	x				x	14
Broad Form Premises	x	x	x		x	x	x	x	x	x	x										x	11
Interior Robbery	x	x			x	x	x	x	x		x			x						x	x	11
TOTAL USE	6	4	2	1	4	5	5	5	4	3	3	1	1	1	2	1	1	2	2	1	6	60

EXHIBIT IV

1956 CALENDAR YEAR EARNED PREMIUM

BY MAJOR STATE BY SUBLINE

NATIONAL AND MUTUAL BUREAUS

	Mercantile Open Stock	Safe Burglary	Interior Robbery	Premises Broad Form	Total
New York	3,699,890	385,395	743,893	1,723,130	6,552,308
Illinois	1,474,471	104,939	281,149	765,225	2,625,784
Pennsylvania	675,376	92,323	145,789	651,909	1,565,397
Ohio	481,663	96,187	146,725	652,371	1,376,946
Texas	403,896	229,329	116,711	687,488	1,437,424
Michigan	417,168	81,426	119,037	538,120	1,155,751
Massachusetts	422,786	54,460	82,512	387,132	946,890
All Other *	3,368,186	992,816	822,643	4,768,041	9,951,686
Countrywide *	10,943,436	2,036,875	2,458,459	10,173,416	25,612,186

* Omits California, Missouri, Montana, and Idaho

EXHIBIT V

PROPOSED COMMERCIAL BURGLARY CLASSIFICATION CODES

Standard IBM Card Columns 24, 25, 26, 27

(These codes are applicable to the Policy Forms indicated. All other Policy Forms code 0000 in this field)

Applicable to Policy Form Codes:

Mercantile Open Stock	- 20, 26
Mercantile Safe	- 71
Loss Inside the Premises	- 60, 76, 77
Mercantile Robbery - Inside	- 32
Mercantile Robbery - Outside	- 40
Loss Outside the Premises	- 61, 78, 79
Paymaster Robbery	- 41
Paymaster Broad Form	- 62
Storekeepers Burglary	- 73, 82

TYPE OF BUSINESS - Column 24 - Policy Forms 20, 26, 71, 32, 60, 76, 77, 73, 82

These codes reflect the actual numerical manual classification of the risk.

Manual Classification	Code
Class 1 or Unclassified	1
Class 2	2
Class 3	3
Class 4	4
Class 5	5
Class 6	6
Class 7	7
Class 8	8
Class 9, 10, 11	9
(Non Classified Policy Forms	0)

A. PROTECTION - Column 25, Policy Forms 20, 26, 71, 60, 76, 77

Description of Protection	Code
Certified Central Station Alarm Systems	
Alarm System Only	1
Alarm System & miscellaneous protection other than watchmen	2
Alarm System & watchmen with or without miscellaneous protection	3
Other Alarm Systems - Non-Certified and/or Local	
Alarm System Only	4
Alarm System & miscellaneous protection other than watchmen	5
Alarm System & watchmen - without or with miscellaneous protection	6

EXHIBIT V Cont.

Description of Protection	Code
Watchmen	
Watchmen Only	7
Watchmen & miscellaneous protection	8
Watchmen & alarms - See codes 3 or 6	9
Miscellaneous Protection	
Includes all credited protection except watchmen or alarms.	
No Credited Protection	0

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B. PROTECTION - Column 25 - Policy Forms 32, 40, 61, 78, 79, 41, 62

Guards	
Guards Only	1
Guards & miscellaneous protection	2
Guards & private conveyance only	3
Guards & miscellaneous & private conveyance	4
Private Conveyance	
Private conveyance only	5
Private conveyance & miscellaneous protection	6
Private conveyance & guards - See 3 or 4	
Miscellaneous Protection	
Includes all credited protection except guards and private conveyance	9
No Credited Protection	0

Policy Forms not specified in A or B punch 0 in Column 25

* * * * *

PERCENTAGE PROTECTION CREDIT - Column 26 - All Subject Policy Forms

All credits from manual rates except for experience credit and additional exposure credit should be reflected in this column. The aggregate modification for all other protection should be computed and coded as follows:

Aggregate Modification	Code
1.00	0
.90 to .999	1
.80 to .899	2
.70 to .799	3
.60 to .699	4
.50 to .599	5
.40 to .499	6
.30 to .399	7
.20 to .299	8
less than .20	9

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EXHIBIT V Cont.

LIMIT OF LIABILITY - Column 27 - All subject policy forms

Dollar Limit of Liability	Code
0 - 1,000	0
1,001 - 2,000	1
2,001 - 3,000	2
3,001 - 4,000	3
4,001 - 5,000	4
5,001 - 7,500	5
7,501 - 10,000	6
10,001 - 15,000	7
15,001 - 20,000	8
Over 20,000	9

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