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BURGLARY TRENDS AND PROTECTION

PAUL J. GIRARD

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It is most important that we have a working knowledge and a complete understanding of the terms burglary, robbery, theft, and larceny, and that each be used accurately and with such frequency as to become a habit. Too frequently we hear said that somebody's apartment was "robbed" while they were away. Of course it is meant that the apartment was burglarized. Even news items describe burglaries as robberies. For the purpose of this paper the definitions used are generally not used in the legal sense.

Burglary is the felonious (any act punishable by a term in the penitentiary) forceful breaking and entering of an enclosure such as a building or a receptacle such as a chest, safe, or vault for the purpose of committing a felony such as stealing valuable property. Breaking and entering prompts the thought of something that is unattended. A merchandising establishment, manufacturing premises, or warehouse which is not open for business and without a person in attendance.

Robbery is the felonious forceful taking of property from a person who is or has been intimidated or rendered unconscious or killed by a malicious act. Robbery suggests the presence of a person to be intimidated.

Theft is defined in some dictionaries as a surreptitious taking of property. It is the felonious taking of property without the owner's knowledge or consent. Larceny is synonymous. It means the same thing. Theft is the legal term in some states. Larceny in others.

Law enforcement is business. Big business. The business of protecting merchants is a part of law enforcement. Apprehending criminals is another division of our work. Some of our special agents are in mail order or retail protection, some in law enforcement and related lines. All are interested in preventing crime, apprehending criminals, and administering justice.

Merchandise is more important than any merchandising aid. It is more important than artificial light because when necessary merchandise can be sold in daylight hours. Business does not halt during a temporary power failure which results in discontinuation of electric lights. Business continues, perhaps not as usual, but it does continue with some degree of success. The merchant does not close his doors during a temporary heat failure. He will continue his business operation as long as the more rugged customer will suffer some discomfort to take advantage of price reductions that may be offered in an effort to relieve some of the discomfort.

In comparison, let us see what happens when the burglar strikes. Take for example a clothing store that is well stocked for the coming Easter trade which is probably at its peak at that season. Burglars clean it out usually when the inventory is highest—just before the public gets the urge to buy. What happens when the merchandise is gone? If the burglary happens when immediate replacement of the merchandise is not possible the merchant suffers the loss of not only the value of the merchandise but also the anticipated profit which he would have had if he had the merchandise to sell. These two items may total a sizable sum, and in addition he may face the possible loss of some customers who investigate other shops in the almost uncontrollable urge to buy a suit or top-coat for "Easter". Merchandise is business. Without it there can be no business. Protection of property is of vital importance.

Protection of property is primarily the job of the owner of the property. It is folly to rely upon a person to protect property in which he has no interest, or let us say no reason to go out of his way to safe-guard the property of another or to jeopardize his safety in securing property that does not belong to him. Certainly it is disastrous

TABLE 1

Year	Units Reptg.	Population	Burglary	Robbery	Larceny
URBAN					
1957	2585	80,369,611	406,117	52,323	1,065,038
1947	2076	65,432,168	266,096	38,906	551,683
Diff.	+509	+14,937,443	+180,021	+13,417	+513,355
%	+24.5	+22.8	+79.6	+34.5	+93.1
RURAL					
1957	1560	38,823,058	111,164	7309	172,743
1947	1392	31,129,564	46,165	5733	63,872
Diff.	+168	+7,693,494	+64,999	+1576	+108,871
%	+12.1	+24.7	+140.8	+27.5	+170.5

to entrust property to those who may have a different kind of interest—a covetous interest.

Acts of burglary, robbery, and theft which result in loss of valuable property are as old as man. As long as man has been, the urge to acquire the property of another has existed. The hazards to which valuable property is subject today are no different than in the days of early history except that the frequency of occurrence is greater today.

At the beginning of World War II leading criminologists predicted that during the war years and for some years thereafter the United States would find itself in the greatest crime wave of its history. Statistics found in Uniform Crime Reports issued by the F.B.I. reflect the accuracy of that prediction. Most of that which appears in table 1 is found in the annual Uniform Crime Reports covering the years 1947 and 1957. These years were selected for research because they cover a ten year span and as respects the rural statistics, the 1947 report reflects the population of the area covered by the 1392 reporting units.

In 1947 police officials of approximately 2100 cities with an aggregate population of approximately 65½ million people reported 226,000 burglaries or about 35 burglaries for each 10,000 people. In 1957, ten years later, the rate jumped to 50 per 10,000 people, an increase of 43%. Approximately 1400 sheriffs and rural officers servicing approximately 31,000,000 people in rural areas in 1947 reported over 46,000 burglary offenses or about 15 per 10,000 people. This represented 42.8% of the average offenses reported by cities. However, in 1957 the rural rate moved up to 29

per 10,000 people, an increase of 93%. The 29 burglaries per 10,000 people was 58% of the 50 per 10,000 people reported by cities. This is most interesting when we consider that the urban or city ten year increase was only 43%. The rural increase is 50 points higher than urban. If the increase continues, the rural offenses will soon be equal to and can exceed the urban.

What is bringing about this very rapid rural crime increase? Probably many factors contribute. We find today business ventures operating without an attendant. They are completely self-service, open 24 hours a day without any one in charge who can offer even by his mere presence some resistance to those who are waiting for just such an opportunity. Leaving a flourishing business to take care of itself or relying on passersby or neighbors to protect the property is to use a slang expression "Asking for it". It is an open house invitation to come and get it. We also find increasingly large concentrations of highly attractive merchandise in fairly isolated places outside of municipal police protection, completely lacking adequate protection—in fact, having no protection at all. We also find so many places cashing paychecks for and to attract customers. This practice creates the abnormal exposure of an accumulation or the periodic obtaining of amounts of cash money far in excess of the normal business requirements. A banking operation is attempted without adequate protection. Is it not reasonable to assume that such and any other practices may contribute to the rapid increase in the rate of burglaries, robberies, and larcenies. The very numerous losses of property

cost owners a huge annual sum. It seems reasonable that adequate protection will save much property which is needlessly lost. The value of property saved by adequate protective measures will far exceed the cost of good protection. "An ounce of prevention is worth a pound of cure". Again, it must be said that protection of property is basically the responsibility of the owner.

Police and many law enforcement officers are charged with the protection of life and property; the enforcement of all laws and ordinances and the arrest, apprehension, and prosecution of those who break or violate the law. The police officer is charged first with the protection of life and secondly with the protection of property.

A high percentage of police personnel is assigned to traffic control because police administrators recognize the importance of traffic control in the overall duty of protection of life. Much of the time of the police officer is spent in the major duties of apprehension, arrest, and prosecution of violators of the laws.

The remaining time of the police department is available for protection of property. Knowing the wisdom expressed in the adage "An ounce of prevention is worth a pound of cure" the intelligent, conscientious, alert police officer makes every effort to protect against attack by the marauder the property within his post to the best of his ability. His ability is limited to the area which he can efficiently cover. The efficiency of man power protection can be nullified if it is spread over too large an area. More man power is one solution. More man power increases cost of operation and maintenance of the police department. The cost of this vital operation is paid for by a part of the tax dollar. There can be no increase in cost of operation without an increase in the tax levied against all who pay taxes. Increase in tax may be resisted by those to whom the benefits of increase in police department personnel and equipment is not immediately apparent. If such resistance is by the majority, the police administrator is expected to make the best use of available facilities. Even the best utilization of available facilities may not be sufficient to effect complete protection of all, concerning the security of which the administrator is charged. This usually normal situation does not permit the assignment of a police officer to guard each business premises during non-operating hours.

The owner of property cannot expect his neigh-

bor to look out for his property because the neighbor has his own property to look after and his own interests and his own desires. The neighbor can not have the same degree of interest in another's property. Therefore, the job of protecting property is the job of the owner, and if the property is of sufficient importance to the owner, it is of sufficient importance to protect not only to the extent of the ability of the owner but even beyond because the owner's ability may not be sufficient.

Protection of property costs money. It is a major item in the cost of operation of business. It can be the factor that determines success or failure. The cost of adequate protection should be investigated before acquisition of property. Too frequently the exposure is created before adequate protection is arranged or even planned and disaster results from either an unnecessary loss of the property or protection is so hurriedly employed as to create prohibitive cost. Therefore, the cost of protection is a major point for the merchant to consider before he acquires property which he cannot possibly adequately protect.

Two factors which contribute to the success of merchandising is the attractiveness of the merchandise to be sold and the availability of the merchandise to those who will be attracted to its purchase. Location then is important. Years ago, merchandise was displayed for sale at the place of its source, its manufacture or production. This was made necessary because of the limited facilities for transportation. This required those who were attracted to the wares by necessity or other motivations to travel from their places of abode to the place of sale. The "Market Place" is mentioned in the Bible. Cities, towns, and villages increase in number with the ever increasing population. During the last, and a portion of this century, the necessities of life and luxury items were grown and gathered where such flourished and the raw product transported by water vessel or rail to the market place or to mills for transformation to a finished product which was then moved to the place of sale.

Again the "Market" was in a place where comparatively large numbers of people would have ready access. This centralization of merchandising was made possible or limited by the water and rail facilities which serviced cities and towns with more speed and economy than man or animal power. As the value and concentration of merchandise grew with the increase in number and

size of merchandising stores and population, protective forces became necessary and police departments were created and grew larger. Progress continued. Automotive transportation came into being. The passenger car has accelerated the moving of city folk to the suburbs. The deep urge to expand and the facilities of the long distance trucker encourage the enterprising merchant to bring his wares close to the buyer. We now have "Shopping Centers" in rural or isolated areas which provide little or no protection other than the physical protection of the building containing the valuable property. Usually, these are outside the corporate limits police protection of the city, town, or village and add a heavy burden on the state and county law enforcement units.

The prudent owner must give thought to protection of his property against the destructive forces of the elements. In an attempt to do that, the property is put into something which offers such protection. In many cases little or no thought is given to the equally or more destructive force of fire or the criminal acts of those who would take the property.

Burglary-Premises security is our subject today. The container of the property is important. Again for the purpose of this discussion, we will consider property which is fairly easily movable and not the heavy machinery type.

It is a fair assumption that steel lined concrete reinforced with steel rods or rails in walls, ceiling, and floor without basement as is found in some vaults is the type of construction which offers maximum physical security. The practicability of such may be questionable and the cost may be prohibitive. It must be remembered, however, that some property is so valuable and attractive to burglars as to demand costly construction, and such is not an altogether ridiculous thought. If the property is of sufficient value and attraction to burglars, it is worth the expenditure. In the order or security that each affords, we can generally think along the lines of solid concrete; solid brick; brick veneer outside of concrete block or fire tile; brick veneer outside of frame and finally frame. The space allotted to this paper is not sufficient to thoroughly discuss each type of construction that should be considered for containing each type of property and the space that is taken so far is used only in an attempt to emphasize the importance of providing the proper container for each or any given property, all of which is from

the standpoint of security against criminal attack. It must be remembered however that that which is constructed, made, or put together by man can be destroyed, torn down, or dismantled or disassembled by man. Given enough time the burglar will do just that.

Entry through holes resulting from brick removed by the quick, unyielding force of a hydraulic jack applied against the side of even a 12" brick wall is a method frequently used in today's premises burglary circles. One story construction is the vogue today and this type makes the roof that much more accessible, particularly if there is close by a utility pole with climbing cleats. The average roof is of light construction and easily entered. Each burglar has his favorite method of attack and may choose walls or roof because he feels that windows and doors are "booby trapped" with devices that may be his downfall, and he theorizes that "booby trapping" roof and walls adds to expense that discourages such added protection.

In recent years there has been invented and manufactured a type of cutting tool which is reputed to be capable of boring through and cutting into concrete and steel an opening as large as 14 inches at the rate of about one inch of penetration or cutting per minute. This cutting tool is cylindrical and is activated by electric power.

An advertising brochure calls this tool "Hole Drilling Equipment". The tool is described in the brochure as: "The World's Fastest Concrete Drilling Machines because Diamonds do the job" and: "Never before have plumbers, electricians, and builders been able to drill clean, smooth holes in hard reinforced concrete with such exceptional speed and care". Also, "No more hammering, banging, or chiseling". Also, it is said that: "For holes from $\frac{3}{16}$ " diameter to 14" diameter the Hole Drilling Equipment can supply a machine for almost any concrete drilling job. Holes are drilled in minutes instead of hours". Under one picture cut appears the words: "Six inch diameter cores removed from floor slot showing reinforcing rod cut". Under another picture can be read: "Model III—machine drills a twelve inch diameter hole at the rate of one inch depth per minute in air conditioning job in a large hotel. Shaft extensions are available for any depth". Another interesting wording below one of the pictures is: "Lack of vibration, dust, and objectionable noise allow—machine to drill holes

through the hardest building materials in occupied buildings with virtually no disturbance to occupants". Apparently, there are many models, and one is pictured as being a hand tool, in connection with which the wording is: "A flexible power unit is equipped with a—water swivel to drill 2" diameter holes at the rate of 2 inches per minute". Reading further about this machine we are told that: "This new—water swivel unit converts any standard electrical drill into a water cooled diamond bit, masonry drilling machine. Since this unit will adapt drilling bits to any commercial electric drill it becomes a very low cost method of cutting 1" to 4" O. D. holes in hard-to-get-at places".

Not too long ago a distributor suffered a loss by burglary of such cutting tools having a value reported at \$40,000. It does not take much imagination to visualize what can happen with tools such as these in the hands of burglars. As respects that burglary, a \$1000 reward has been offered for information leading to the arrest and conviction of the persons involved.

Usually, the security officer is not consulted before or has little to say about construction. Frequently, only after the building is a reality. From that point, he is faced with the job of producing the almost unknown that will protect the building that in itself is supposed to be the protector. In short, he must make a protector of that which offers little or no protection at all.

After walls, ceiling, and floor have been decided upon, consideration should be given to doors because they offer to the burglar access to the interior and a convenient opening through which the desired property can be quickly removed. The security officer is confronted by many types of doors. One is the large garage wooden type covering an opening sufficient to accommodate a truck. Of these, we find the swing type of which there are usually two to a set hinged on each of the two outer edges of each half. The first to be closed is usually secured by a bolt that is lowered into a strike plate or opening in the floor and by a similar bolt at the top which can be raised to engage a strike plate above the door. The second half of the door is usually held in a closed position by a bar held in place by a pin or bolt through the center of the bar through one door to permit rotation and placement in a steel cleat on the inside of the second half. Such doors should be lined on the inside with sheet steel of sufficient gauge to

resist entry through the wood of the door by boring with brace and bit. If the bar is wood, it should be at least 2 x 4 and should be covered by sheet steel to prevent sawing. The bar or brace should be securely padlocked in place.

Another type is the overhead rollup or roll-away. Some are wood, some steel. The wooden type should be made secure against boring by metal lining although this creates the problem of weight which may outbalance the spring arrangement or counterbalance weights. The locking mechanism should be of the positive deadbolt type, not the spring type. Regardless of the lock the track through which the side rollers run should be drilled to permit the introduction of padlocks when the door is in the closed position.

This padlock and any other which is to be used in an effort to provide security should have a case hardened shackle and the shackle secured by case hardened steel ball bearings within a one piece case hardened body. The padlock should be secured in the track in such manner as to limit movement of the roller to the absolute minimum.

The front, rear, side, and service entrance or exit doors should preferably be of steel or steel lined on the inside. If the door opens outward the hinges should receive special treatment. Hinge pin knob sawed off and pin riveted permanently in place to prevent removal. Also, a bolt arrangement can be attached to the back or inside of the door at the hinge side face or edge of the door and permitted to protrude wherever possible at least 2" beyond the edge of the door to engage a slot or strike plate in the door jamb or casing or frame to effect the same result as the locking arrangement found in some safes and vaults, which arrangement reduces the purpose of the hinges to that of a carrying agent and not that of locking security. More will be said about this when safes and vaults are discussed.

Little time should be spent on deciding what kind of door should be hung on a building which by reason of its flimsy construction offers no protection by itself because as a chain is no stronger than its weakest link a building is no stronger than its weakest door, window, wall, floor, ceiling, or roof. It is useless and a waste of time, effort, and money to give complete consideration to one point of construction and practically none to another point which is equally vulnerable to attack.

If the building and doors are equal to the risk,

the next important item is the lock that secures the door. There are two general types.

First, the mortise type, in connection with which the lock case is completely installed within an opening cut into the lock side stile of the door. The Mortise type comes in several varieties. The simplest is the barrel bolt type which is controlled only by a knob or button on the inside of the door. The barrel bolt is round and cut square at each end and is therefore called a "dead bolt". This is the positive type.

Another is the lever or ordinary key lock, the bolt of which can be of the dead bolt type or the beveled kind which is called a spring bolt which permits the bolt to engage the strike plate when the door is closed without turning the knob or key. The bolt springs into locked position.

A third variety (cylinder) is that which has been introduced in later years. It is made either with a spring bolt, a dead bolt or one that is called "jimmy-proof". The spring type bolt is seldom recommended.

The "throw" (length of the bolt extended beyond the lock case) of the standard Mortise lock is approximately one-half to one inch. Leverage on a jimmy tool inserted between the door and the jamb may be enough to separate the two sufficiently to disengage the spring or dead bolt from the strike plate and the security has been defeated. This is particularly true of loose fitting doors.

The jimmy-proof dead bolt prevents this type of security defeat. The bolt and strike plate are so fashioned as to permit them to interlock in, through and around each other to form one inseparable unit that will resist attempt to separate door from jamb.

The third type of mortise lock is controlled by a cylinder containing pins which are placed in such arrangement as to accommodate a key cut to fit the pin arrangement. The Mortise lock may be equipped with one cylinder, either on the inside or outside of the door depending on the purpose to be served. This is called a single or one cylinder Mortise lock. It can be installed with the cylinder on the inside with no cylinder or key opening on the outside. This tends to conceal the presence of the lock and adds to its security. Some of the single or one cylinder locks have the cylinder on the outside and a turn button or knob on the inside. About all that can be said for this kind is that the cost may be little and the button or knob

may be convenient if need for activating the bolt work is frequent, but if the knob affords convenience for the authorized, it offers equal convenience for the unauthorized. A knob lock should be used only when opening from the knob side is unimportant to and does not diminish security.

In most installations, two or double cylinders will provide much more security. To obtain maximum benefit, the key should be removed from the inside cylinder when the premises are closed and unattended. This will prevent easy exit by any one who is on the inside by hiding during business hours or entering through a weak point.

The sides of the cylinders are threaded almost the entire length and screw into threads cut into openings into the lock case which is inside the door. Each cylinder is locked into place by a long set screw through a metal plate in the face or edge of the door through the lock case, and the end engages and rests against a slot cut into the side of the cylinder and resists removal of the cylinder from a closed door by a person on the outside or inside. A lock as elaborate as this is dependent for its security upon a single small set screw which can be easily removed when the door is opened by any person with a tool as simple as a paper clip—certainly not more than a fingernail file. These are "burglary tools" and are adequate to accomplish this purpose. It is accomplished quickly and without detection. The set screw can be removed only when the door is open. Seeing that it is in proper place and in holding position should be one of the major duties of the person charged with securing the premises. Some such locks are now equipped with an extra plate which through the medium of at least two screws covers the plate through which the set screw is secured.

Another variety of lock is called the "rim" type. It differs from the Mortise kind in that the lock case attaches to the inside of the door and is completely visible from that side of the door. The outside cylinder is inserted from the outside, through a hole through the door, and is held in place by two screws, passed through an inside base metal plate into two threaded shoulders which are part of the cylinder body in such manner that tightening of the screws will hold together base plate and cylinder as one unit. Through an intermediary "bar" or tongue attached to the back end of the outside cylinder and inserted in a slot in the lock case the locking bolt is activated by a key inserted and turned in the cylinder. Again,

to effect maximum effect, this type should also have an inside cylinder which is part of the lock case. Burglars soon found that the base plate and locking screws are the weak points of this lock and defeat it by pulling out the outside cylinder. In an attempt to discourage this method, at least one manufacturer builds into the lock case a spring activated shutter which springs shut when the bar is removed in the pulling process. There is also on the market a lock plate which can be so installed on the outside of the door as to completely cover the outside cylinder except for the key opening which is available through a small hole in the lock plate. The lock plate should be secured by bolts completely through the door.

More valuable property such as money, securities, expensive jewelry, and furs should be contained in chests, safes, or vaults when the business premises is closed. The type of safe, chest, or vault is of extreme importance. Generally speaking, four terms are used in the safe industry. These are fire-resistive; semi burglar-proof; burglar-proof, and double burglar proof. To afford double protection against loss by fire and burglary, the units under these various classifications are combined. Fire resistive units alone are not intended to be used to protect high values of valuable property against burglarious attack. Their purpose is to provide protection against fire, and even though some of these may bear a re-locking label or a T-20 Label which suggests protection against burglarious attack they offer limited protection against burglary. The T-20 designation indicates that the unit has protective features that are tested to resist burglary attack by tools for 20 minutes.

The burglar-proof units are usually built with rectangular doors, and most of those manufactured many years ago have doors of plates attached to a cast or shaped frame that is built in a stepped design which fits into an accommodating stepped design of door frame or jamb. This type of construction offers little resistance to the introduction of explosive material.

In an attempt to defeat the activity of the burglar who uses explosives, the safe manufacturers have developed the round door chests which carry the alphabetical designations, E, F, G, or H. The door of these units is usually of solid steel, shaped round to permit of precision machining to produce a closer fit into a round frame or jamb, which precision fitting is so close in good manu-

facture as to resist introduction of explosives, even liquid nitroglycerin. These fall in the general classification of double burglar-proof; some chests contain copper for the purpose of resisting the cutting torch.

The present day burglar has learned that modern safe or chest equipment offers considerable resistance to his attack and many prefer to completely remove the unit to a place where sufficient time and security is available to open the unit. It is necessary therefore that these portable units be securely anchored to prevent or resist removal. A very important precaution is the encasement of the unit in a steel reinforced concrete block which offers additional protection against burglarious attack directed to the bottom, top, sides, and back of the unit which in many cases consist of solid steel of 1" thickness. The door is usually a minimum of 1½" of solid steel.

A very important point to continuously keep in mind is that while the combination lock offers much resistance to the person who does not know the combination, it can offer no protection against manipulation by those who know the combination, or if those who are charged with completely locking the combination, do not do so. We find many people who have frequent need for access to the contents of a unit either do not re-lock the unit after each entry or merely turn the dial a few numbers from the opening number. Many losses have occurred through the simple means of turning the dial a few numbers one way or the other until the opening number is reached.

Obviously, all of the protection which has been covered so far is limited in its scope. All protection devices are man made, and that which is put together by man can be taken apart by man. At best, the physical protection device is a deterrent and creates a time obstacle for the burglar, robber or thief. Again, if given enough time the marauder will be successful.

Some property may be so valuable as to suggest protection above and beyond that which has been discussed. The first thought of such additional protection may have to do with watchman service, the theory of which is excellent. The watchman is subject to human frailty. He is subject to sudden illness which requires his absence from his duties. This may occur at a time when a replacement is not readily available. He may become so ill while on the job as to lapse into unconsciousness. He is subject to ruses, in connection with which some

burglars are adept. Through these ruses the watchman may be lured into a trap. Again this form of protection is limited and should be augmented by a Central Station Reporting Service which not only adds to the efficiency of the watch service but also is a means of self-protection for the watchman.

Finally, the electric and modern electronic protection is found in the various types of alarm systems which are available today. Each of these systems is available for a particular job and some have limitations. Again, it is necessary that the proper system be employed to do a certain job. The limitations of this system should be known and the system should not be expected to extend beyond its limitations.

Obviously the best system is the Central Station Class A Installation #1, which protects the complete perimeter of a premise. This can also extend to a vault enclosure, in connection with which the designation is "complete". We then have the ultrasonic system and the invisible ray, and as respects safes and vaults we now have the system, in connection with which we find an "electronic field" created completely surrounding the unit to register an alarm when any foreign body enters the "electronic field". We also have the "phonet" alarm for vault enclosures in which a microphone is employed. Perhaps the premises system more in use than any other is the Class A Installation 3. Up to a few years ago this offered considerable

protection, but the burglars have learned its short comings and frequently defeat it by entering through an unprotected part of the building such as a roof, a floor, a partition wall, unless the A-3 system is extended to include protection of those areas.

This paper will not be complete and will avail nothing without the explanation that generally speaking there are two forms of protection. First, the physical protection which is the inherent responsibility of the owner of valuable property. He can not delegate this responsibility to any other person. The second form of protection is financial protection of which there are two types. First, that which the owner of property may have by way of a "loss reserve" on which he can rely to continue his business without serious consequence. The other is insurance, in connection with which it might be said that the alert insurance underwriter will be inclined to only those risks which are reasonably secured against loss by adequate physical protection provided by the prospective insured. Insurance companies survey risks for the purpose of suggesting methods to eliminate or strengthen weaknesses and reduce limitations of physical protection which are discovered by specially trained engineers whose expert service is available to purchasers and prospective purchasers of insurance coverages, all of which is without additional charge.