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ENFORCEMENT MANUAL:
Approaches for Combatting Arson-for-Profit Schemes

Volume I:
Strategic Approaches

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Publications
PREFACE

This manual can best be described as a set of steps which an investigator can take to address the growing problem of arson committed for insurance fraud. It is divided into two parts: the first deals with plans and strategies; the second with operational tactics. As in most other contexts where this distinction is made between strategies and tactics, the dividing line is difficult to draw. The important point is that successful investigation of arson-fraud (i.e., arson-for-profit) cases almost always requires that the initial steps be devoted to planning the investigation, analyzing background and intelligence information, and formulating the next operational investigative steps.

A noted law enforcement expert on sophisticated crime schemes recently commented on the apparent edge which schemers seem to have over law enforcement agencies—the schemers have the advantage of experience and, very often, the organizational support which a collection of criminals working together can provide to its members. Investigators confronting arson-for-profit rarely start with extensive experience in this newer area, and the fragmented nature of our criminal justice system can deprive investigators of the benefit of equally strong, formal bonds of organization, as they move across city, county, and state lines in pursuit of culprits. This expert went on to note that what law enforcement agencies do have on their side is the element of time: "Time is against the criminal, because he knows that with time he's susceptible to making mistakes. And I'm looking for that mistake...."

The above statement captures perfectly both the disadvantages and advantages which law enforcement investigators face in trying to make sense out of an arson-for-profit problem. A central goal of this manual is to convince the investigator to take those basic resources which he has and maximize their value. These resources include, in addition to qualified
ACKNOWLEDGEMENTS

In this Manual, I attempted to organize and present the professional wisdom of the pioneers in the field of arson-for-profit control. The search for such pioneers can be difficult and frustrating, particularly when the available wisdom has not been captured before in writing. I had the good fortune to locate such valuable assistance and am pleased to report that it resides both with individuals and institutions. First, I am eternally grateful to two prosecutors whose inspiration was outstanding: Carl LoPresti, then with the Federal Organized Crime Strike Force in Pittsburgh and now in Newark, and John Tarrant, formerly with the Organized Crime Strike Force in Boston. I am also deeply grateful to the Bureau of Alcohol, Tobacco, and Firearms (ATF), which deserves tremendous recognition for its early and continued contributions to the nationwide fight against arson. Supervisors Richard Garner and Jim Reeves (Washington) and Jim Karolides (Seattle) were especially helpful, as were Special Agents Bryant Carvalho (Honolulu) and Frank Hart (Chicago).

The members of my Technical Advisory Panel are to be commended for their patience, as well as for the assistance which each of them rendered to this research and writing effort: Special Agents Robert Walsh (FBI) and Charles Thompson (ATF), Mike De Feo (Chief, U.S. Department of Justice, Kansas City Strike Force), Bob McGann (Office of the Special Prosecutor, New York City), David Icove (Knoxville, Tennessee, Fire Department), Larry Curran (Vice President, First Security Services Corporation, Boston), and John Lynch (U.S. Fire Administration, Washington, D.C.). I want to extend very special thanks to panel member Jack Hickam, Inspector with the Seattle Fire Department Arson Squad, who provided constant assistance on many issues, and mainly on whether the material I was developing would be as useful to personnel as I wanted it to be. I also want to express my gratitude to Mark Zanger, a conscientious journalist from Boston, whose advice on saving neighborhoods kept me mindful of one major goal we are all pursuing. Helpful assistance was also provided at the planning meeting for this project (held in Denver in May of...
1979) by District Attorney Dale Tooley and Chief Deputy Christopher Munch of that office, as well as by Alfred Lima representing the U.S. Fire Administration, and Special Agent John Veler of the FBI Academy.

I would also like to acknowledge the contributions of several experts who agreed to review and comment on various sections and drafts of this manual: Ralph Jackson (Allstate Insurance Company), Fred DeVesa and Charles Hanlon (New Jersey Office of the Attorney General), John Connell (Connell Consultants, Great Neck, New York), Professor G. Robert Blakey (Cornell Law School), Professor Charles Rogovin (Temple University Law School), and Marilyn Walsh (Battelle Law and Justice Study Center, Seattle).

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Finally, I am continually grateful to my project monitors at LEAA for their helpful guidance and support: first, Judy O'Connor (now with the Bureau of ATF), and currently Michael Sheehan, Director of the Arson Unit, as well as Fritz Guertsen and Paula Hayes of that office.

SPECIAL NOTE TO THE READER

Because of the severity of the arson-for-profit problem nationwide, it is essential to discuss in this manual the variety of specialists who come into play as participants in illegal schemes and who greatly magnify their impact. For this reason, certain legitimate business figures primarily engaged in insurance and real estate are discussed in the following pages, together with the roles which they can play in planning and executing an arson scheme. Clearly, the mention of one or another type of businessman or business sector is not meant as a blanket criticism or indictment of that profession. Rather, all available information indicates strongly that an infinitesimally small fraction of such personnel has ever been even suspected of involvement in arson-fraud schemes. However, due to the important expertise which such specialists can bring to a crime, their importance far outweighs their numbers. For that reason this manual would be dangerously remiss in avoiding mention of the role of such specialists in those limited cases where they make their presence strongly felt.
CHAPTER 1: THIS MANUAL AND ITS ROLE IN COMBATING THE NATIONWIDE PROBLEM OF ARSON-FOR-PROFIT

Introduction

Arson-for-profit is a major and growing crime problem in the United States. For years, experts close to the problem have warned of its dangers. Nevertheless, the crime has grown to the point where it now constitutes a serious menace to the social and economic well-being of the Nation and its citizens.

The above quotation introduces the U.S. Senate Report, Arson in America, published in 1979 after a year of nationwide investigation into this crisis. Like any problem which seems to fester for decades before national recognition focuses attention on it, arson-for-profit is now basking in the limelight of concern of agencies at every level of government. It is very important to keep in mind that arson committed for economic gain, like any other criminal act, is an overt manifestation of more basic and deeply-rooted problems in society. In this case business recession, declining inner-city areas, and organized crime domination of an industry are all basic reasons why the nation seems to experience periodic increases in arson-for-profit activity.

Law enforcement agencies are by statute and organization relegated to attacking the fires and frauds which are the symptoms of the deeper problems. However, we must never forget the reality that arson-for-profit, while but a symptom, is an especially deadly one. In applying a medical analogy to this crime issue, we should be mindful that arson, like any serious symptom, can, if allowed to reach epidemic proportions, do as much or more damage than the disease itself. Put simply, fever kills, and perhaps this analogy applies equally well to arson-for-profit and what it does to our cities and our social and economic fabric.
I. The Focus of This Manual

Arson-for-profit is a complex national problem. On the one hand we have seen it committed by businessmen who face serious financial problems in order to obtain insurance money. On the other hand, we have seen examples of arson growing out of labor-management violence and the actions of a business rival to drive his competition out of business. In still other cases, we have seen automobiles destroyed intentionally by fire—if not for a profit then to cut the owner's growing loss of maintaining a "gas guzzler." Can any one term adequately refer to all of these forms of incendiary crime? That would be difficult. Moreover, evidence at hand indicates strongly that arson committed for insurance fraud (as well as banking, credit, and other forms of fraud) is the greatest component of the economic arson problem. Furthermore, because arson-for-profit is committed by rational, calculating criminals who seek an economic benefit, we can expect them to ponder the increased chances of prosecution and imprisonment which a vigorous law enforcement program can threaten.

Therefore, the primary focus of this manual is on insurance and other financial frauds which grow out of the incendiary destruction of property.

Any investigator or prosecutor who has taken a glimpse at the arson-for-profit problem knows that the challenge is a demanding and frustrating one. To begin with, there is the problem of the fire's cause—and whether it was set intentionally, and if so by whom, and whether the owner knew of or benefited from the fire. Following directly on the heels of the "fire cause and origin" question is that of motives why was that fire set, who benefited from the fire, and by how much? In order to answer these questions, it is necessary to probe the owner's and/or the business' financial condition; a difficult task for most fire and police investigators. Where investigators suspect insurance or some other fraud motive, the issue takes a radical turn from fire investigation to white-collar crime investigation—two complex and demanding enforcement disciplines which understandably developed and evolved in their own separate ways.

The investigator who comes upon (or is handed) an arson-for-profit case can hail from any one of a number of investigative specialties: fire cause, arson, general detective, professional theft, white-collar, and even organized crime. How can the scattered and confusing pieces of evidence and circumstances be held together in order to form a true picture of what actually happened? That is a basic objective and primary challenge of this manual. Its purpose is to familiarize the fire service and police investigator, and the prosecutor who becomes involved at the investigative stage, with the problem of arson-for-profit, the motives of criminals who deal in this area, the vulnerabilities to which they leave themselves open, and some methods for taking advantage of these vulnerabilities.

This manual is mainly designed for the investigator, but does not seek to make him an expert in arson, white-collar, or organized crime investigation. That would be an unwise objective, for it is almost impossible to accomplish. Rather, the purpose of this manual is to enable an investigator to identify patterns of criminal behavior which are somewhat peculiar to this field of crime, and to be able to build and continue the momentum of an investigation as long as it is possible to do so—hopefully through to prosecution if such action is warranted by the facts. To continue an investigation may mean, in certain cases, to the point where an investigative accountant should be called in, or to the point where a prosecutor should utilize the grand jury as an investigative tool. In other cases, it may be next to impossible for the investigator to build an arson or insurance fraud case, and other criminal remedies, as well as civil ones, should be explored.
Arson-for-profit is a term which describes motive rather than a particular statutory violation. In many respects, this kind of term is helpful because it focuses our attention on the need to identify the precise motive before we too quickly assume one and perhaps begin an unproductive inquiry. In order to locate the motive, it is necessary to distinguish whether the arson occurred as a result of a business or personal financial problem, or whether it developed from a fraudulent scheme where there was no financial distress.

The investigator who can identify a fraud-related motive will open the door to new sets of documents to review, witnesses to interview, and informants to debrief. Falling short of identifying the specific motive, the investigator is left with hunches and assumptions and possibly even prejudices which our legal system requires that we rigidly segregate from evidence. In order to help the investigator learn as much as possible about why a particular fire occurred in a certain business, this manual places a great deal of emphasis on learning about business practices, internal financial operations, and economic conditions. This focus is designed to assist in the development of "economic intelligence" on arson-for-profit, as well as on the identification of possible parties to the crime within the business entity itself.

A second area of major focus is the range of criminal specialists who enter the arson-for-profit field. Experience has shown that for a community to experience an arson-for-profit epidemic, all it needs is one active professional torch who is able somehow to find enough willing businessmen and other clients to create incendiary havoc. Realistically, however, those who want to set or arrange an arson fire do not always know how to contact someone whose job (or avocation) is the setting of fires. In order to help the "buyers of fire" (the owner or client) strike a bargain with the "sellers of fire" (torches), a variety of middlemen enter the picture. Usually these middlemen are comfortably situated in the midst of a network of information on many types of criminal opportunities--fencing in particular, but also loan, credit, insurance, and other types of fraud. Some of them merely steer the owner to a torch--these are known as "pigeons." Others bring the client and torch together, and stay around to work with each to inflate the insurance coverage, assure total destruction of the building, and reap the largest profit possible. In order to feed their profit motive, still other specialists may enter the picture, and it is common to find in many parts of the country white-collar criminals skilled in banking and real estate practices, federal loan and grant programs, and other types of fraudulent "scam" operations, as well as individuals in legitimate occupations who value a dishonest dollar more than either personal honesty or loyalty to the good name of their business or profession.

Examples of the latter can include, in specific cases, an insurance agent or broker, a realtor, a contractor, a bank loan officer, and even a fire or police investigator. There are also many different types of arson schemes: some are hatched by owners, others by middlemen, and still others by real estate speculators. The steps by which one specialist contacts another, and together they formulate and execute an arson-fraud conspiracy, follow some fairly common and identifiable patterns which we can analyze and understand. In so doing, we can expect to have a better idea of the kinds of illicit transactions each specialist has with the others, and the sorts of things they plot and plan. Therefore, substantial portions of this manual focus on the various arson-for-profit specialists, their known patterns of activity, and the ways in which their fairly predictable behavior patterns make them vulnerable to investigators who have a good idea about "who did what, when, and how."

Therefore, in addition to stressing the variety of motives extant in arson-for-profit cases, this manual discusses the kinds of arson-for-profit specialists which are likely, more
often than not, to "cluster" around a given motive pattern, and
the kinds of paper and other trails which they more than likely
leave behind. While this manual does not provide a formula for
solving each type of arson-for-profit case (which would be
impossible), it is designed as kind of a series of maps to
tackle a series of obstacle courses. Its purpose is to
identify an obstacle which the investigator will probably
encounter, and to relate one or more methods for overcoming
that obstacle—without losing vital forward momentum. Like any
map which represents that it can get the traveler from his
point of origin to his destination, there is an amount of
fumbling and confusion as one moves from a general area to a
specific point on the map, then to the key, and then back again
to try to find the path one was following. That commonplace
"map problem" has its counterpart when one tries to use this
manual. The reader may find himself, unavoidably, moving from
Part I (on strategies) to Part II (on tactics). For this
inconvenience we apologize only once and hope that the reader's
good fortune at arriving at this chosen destination (a
prosecutable case) will outweigh any inconvenience encountered.

Because the modus operandi of arson-for-profit schemes can
come very involved and complex, the range of law enforcement
and related specialists on which an investigator might need to
call is broad. However, if the investigator knows when to call
on an outside specialist and also what specifically to ask,
then a helpful response is more likely to be forthcoming.

Agencies which have access to (either in-house or on an ad hoc
basis) those enforcement specialists which figure in
arson-for-profit cases can expect more frequent success with the
more complex fraud cases. Investigators who are more
restricted in their access to such specialists as accountants,
prosecutors, and forensic specialists, should be able by using
this manual to develop an understanding of where to find
expertise at little or no cost to their agency, and how to
enlist the assistance of such experts.

A prominent investigator with an attractive record of wins
in arson-for-profit cases has said, "Arson-for-profit cases are
just like any other white-collar or organized crime case, only
more so." The purpose of this manual is to explain and clarify
this perhaps puzzling remark and, in so doing, to infuse the
reader with the enthusiasm that arson-for-profit is yet another
law enforcement battle which we can win if only we prepare and
condition our minds in a more appropriate manner to the challenge.

II. The Scope of the Nationwide Problem of Arson-for-Profit

Over the past five years, there has been an increasing
awareness that arson has become something more than the rash
act of the deranged or disgruntled; that it has also become the
calculated act of those responding to adverse business
conditions and to the lucrative potential of fraud schemes.

This latter phenomenon is what is termed "arson-for-profit," or
just "arson-fraud." Thus, for some arson represents a viable
way of averting business ruin; for others, it has become a
method for liquidating worthless assets at a profit; and for
still others, it has become yet another in a long list of
techniques for perpetrating fraud. Such participants have
always been a part of the "arson problem," but never, it seems,
in the numbers in which they appear now. Arson-for-profit has
begun to take its toll in our nation's cities, leaving some
parts of them charred beyond rehabilitation and representing a
real threat to their vitality.

Awareness that arson has changed in character and incidence
has been followed by deep public concern. Such concern has
found expression nationwide in the efforts of citizens groups
which have lobbied to prevent their neighborhoods from being
destroyed; in the actions of fire and police agencies that have
created special investigative units to combat the problem; in
the deliberations of Congressional committees in Washington;
and in the activities of those in the insurance industry that
have attempted to monitor and minimize the opportunities for
profitable fires. Despite the recent attention accorded to arson-for-profit, assessing its scope nationwide remains difficult. In order to develop such a picture of the problem, a confidential survey of thirty-five arson investigation units in fire, police, and prosecution agencies was conducted as part of this LEAA project. The discussion of arson-for-profit below is based on the responses to that survey.

About a third of the jurisdictions responding reported experiencing 500 to 1,000 arsons per year, but about half the jurisdictions reported more than 1,000 arsons annually. The average for all reporting jurisdictions was about 1,600 arsons. Within that group of fires classified as arson, the portion described as arson-for-profit ranged from as few as 1 percent of all arsons in one jurisdiction to as many as 95 percent in another. About half of those responding reported that arsons-for-profit comprise 20 percent or fewer of the total arsons in their jurisdictions; and about a fourth estimated arsons-for-profit at 20 to 50 percent of the total.

When asked about the most common motives associated with arsons-for-profit, most of those responding cited insurance fraud—and in particular, such fraud related to real estate—as the most frequent motive pattern. In over half of these jurisdictions, real estate insurance fraud was associated with more than 50 percent of the economically motivated arsons investigated. Next in prominence as a motive for arson-for-profit was insurance fraud related to motor vehicles, cited by about a fifth of those responding. Motives associated with welfare fraud, extortion plots, and efforts to hide embezzlement were generally regarded as far less significant than were the insurance fraud motive patterns. These other motives were usually cited as comprising fewer than 5 percent of the arsons-for-profit.

A. Organization of Arson-for-Profit

Most of the agencies responding to the survey described arson-for-profit occurring in their jurisdictions as, at best, loosely organized. Only a quarter of those queried indicated there was even "moderate" organization in arson-for-profit; and none of the agencies responding described arson-for-profit as a highly organized criminal endeavor. Rather, while most agencies saw a similarity of motive for many such arsons, they tended to feel that their arson-frauds yielded a crime problem of great variability with only an elementary-to-moderate level of organization.

B. Participation of Specialists

Because of the lack of a high degree of organization noted in arson-for-profit, about 40 percent of those agencies responding found it impossible to estimate the numbers or degrees of involvement for a specific list of criminal specialists. (In general, however, fire service agencies appeared more disposed toward estimating such involvement.) In those jurisdictions where the degree of criminal specialist involvement in arson-for-profit had been established, professional torches were the most common specialist cited as participating in the arson-frauds. One agency indicated that as many as 50 professional torches were operative in its jurisdiction; another noted 25 such criminals. Other agencies cited as few as two professional torches involved in arson-for-profit in their locales, but only two agencies had not found any involvement by such professional torches. Thus, arson-for-profit is viewed by most investigative agencies as dependent upon at least one criminal specialist—the professional torch.

The next most prominent specialty cited for involvement in arson-for-profit is the "pigeon" (i.e., the individual who steers businessmen and others to arsonists). While many agencies did not report any such persons as active in the problem, where pigeons were operative they were generally viewed as being quite numerous—more numerous than professional torches for example. Thus, in one jurisdiction torches were cited as numbering 15, while pigeons there numbered 40; in
another area the respective figures were 10 torches and 35 pigeons. It is clear, then, that where pigeons are involved in the arson-for-profit problem, their numbers are likely to be considerable.

"Fire brokers" and individuals connected with crime syndicates were viewed by responding agencies as each having about the same level of prominence in the arson-for-profit problem. While both of these specialties were cited third in order of their degree of involvement in the problem, the nature of that involvement is different for each. Thus, fire brokers were cited by nearly every agency reporting as being a component of the arson-fraud problem, with 10 or fewer such persons noted in most jurisdictions. Organized crime figures, on the other hand, were not reported as active in about a third of the responding jurisdictions, but where there was such involvement the number of such persons involved was generally greater than for fire brokers. To some extent there appears to be an overlap in services rendered by organized crime figures and fire brokers, such that the presence of one type of specialist seems to minimize the need for the other. Thus, one jurisdiction reported the presence of 20 crime syndicate specialists but no fire brokers; another indicated the presence of 15 organized crime operatives but only 3 brokers. On the other side of the coin, one agency cited 12 fire brokers as being active but no organized crime specialists; another agency reported the existence of 10 fire brokers, but no crime syndicate operatives; and another jurisdiction noted the presence of 10 brokers, but only 5 organized crime specialists.

Finally, the criminal specialists cited least frequently as being involved in arson-for-profit were fences of stolen property. Once again, however, the lack of prominence of fences overall must be balanced with their notable presence in some other locales. Thus, while only a third of the jurisdictions reporting saw fences as a part of the arson fraud problem, 2 jurisdictions reported 20 such persons as actively involved in fraudulent arsons. In general, fences appear to play a coordinating role in arson-for-profit, and mainly where other specialists are active. Thus, the only jurisdictions where fences were reportedly active in arsons were also those jurisdictions where fire brokers, organized crime specialists, and pigeons were also known to be active. Involvement of fences in arson-fraud, then, appears to be a function of the involvement of other crime specialists.

C. Legitimate Business Participants

Investigative agencies contacted were also asked to estimate the involvement of specialists in selected legitimate occupations in the arson-for-profit problem. Once again, more than a third of those agencies responding found it impossible to give such estimates. Of those that could estimate, construction contractors were cited most frequently for involvement in arson-fraud. About a third of the agencies reporting cited contractors as active in arson-fraud in their jurisdictions with as many as 15 and 25 cited respectively by two agencies. The next most prominent occupational specialists cited for involvement in arson-for-profit were public insurance adjusters. Dishonest public insurance adjusters were cited by one-half of the responding agencies as believed to be active in the arson-fraud problem. The degree of involvement of public adjusters varied widely from a high of nine such individuals active in one jurisdiction to as few as two or three such persons in others. Insurance claims adjusters and insurance agents/brokers were also cited as active in arson-for-profit by about a third of the agencies although the number of such specialists involved in any one jurisdiction generally was quite small. Attorneys and accountants were the legitimate occupations least often cited as participating in arson-for-profit schemes.

D. The Nationwide Scope of Arson-for-Profit—A Summary

Arson-for-profit as revealed by investigative agencies charged with coping with it is a crime problem characterized by the following dimensions;
First, arson-for-profit represents a significant category of all incendiary and suspicious fires occurring annually. A conservative estimate would place the number of arsons-for-profit at 10 to 20 percent of all arsons, though in nearly half of all jurisdictions the proportion was considerably higher, and in several individual jurisdictions estimates ran as high as 90 percent.

Second, insurance fraud--associated primarily with real estate and to a lesser extent with motor vehicles--seems to serve as the prime motive pattern for arson-for-profit. Most investigating agencies attributed more than half of all economic arsons to insurance fraud involving real estate. Insurance fraud involving motor vehicles was estimated to comprise another 10 to 20 percent of all arsons-for-profit. All other motives were generally regarded as being of far less significance, responsible for fewer than 5 percent of all profit-making fires; or of only isolated significance in individual jurisdictions.

Third, arson-for-profit is generally regarded at best as a loosely organized form of criminal conduct. None of the investigative agencies contacted viewed arson-fraud as highly organized, and those regarding the activity as moderately organized were as numerous as those who saw no organization involved at all.

Finally, it is clear that arson-for-profit becomes a viable economic alternative when there are present in a jurisdiction specialists (in both legal and illegal occupations) willing to perform tasks essential to the arson and fraud. The most important of these specialists is the professional torch, followed next in importance by the pigeon who steers businessmen, property owners and others to the torch. Fire brokers and crime syndicate specialists were the third most frequently cited persons involved in economic arson, followed closely in fourth place by construction contractors. Fences of stolen goods, though quite significant in several jurisdictions, were generally reported to be of lesser importance than other criminal specialists and cited as being about as numerous as public insurance adjusters. Other legitimate specialists (such as insurance agents/brokers, claims adjusters, attorneys and accountants) were reported to be of significance only in isolated jurisdictions, and even then very rarely.
CHAPTER 2: IDENTIFYING THE MOTIVE

Introduction

In order to prove a charge of arson, ordinarily it is required that the prosecution show that the fire was caused intentionally by a criminal agency, and that the accused had set it, which is generally inferred from his exclusive opportunity to do so. In cases where the fire in question was set out of an economic motive, the investigator confronts the immediate problem of whether the individual who had the opportunity to set the fire had any rational reason for doing so. Was he the most likely one to benefit from the fire? Or, was someone hired to set the fire, and if so, can his "exclusive opportunity" implicate the owner? While establishment of the motive usually is not a requisite element of proof in an arson case, investigators know that few juries are likely to convict someone on the sole basis of an opportunity to burn down his own home or business. Often a major stumbling block in an arson-for-profit case is not proving that the fire was incendiary, but that the arson was committed to defraud an insurer. Arson-for-profit investigations can get complicated very quickly, and unless the investigator can isolate (or at least narrow down) the most likely motive, the fraud aspect of the investigation will probably suffer.

The motive for committing arson-for-profit is economic gain, whether it be the enormous gain from inflating insurance coverage beyond the building's value, or limited economic gain derived from cutting one's losses before oncoming financial disaster.

In order to know where and how to begin the investigation, the investigator needs to determine whether the arson in question was due:

- primarily to financial stress, or
- primarily to a fraud scheme (without much stress), or
- to combined degrees of some stress and the profitability of fraud.
In searching for motive in an arson-for-profit case, the first cardinal rule is:

Always look first for the obvious.

Initially, if a fire appears to have been caused by the owner's serious financial stress, the investigator needs to probe deeper and ask: "Stress, but due to what in particular?" An arson fraud stemming from a loan shark's pressure to satisfy a gambling debt may be investigated differently from a case where the fire was set to remodel an office or avoid a mortgage foreclosure. Each qualifies as arson-for-profit, and each is serious in its own right, but the way that the investigation begins (and how it ends) will depend on the initial determination, or best estimate, of the motive.

No one knows the percentage of arsons-for-profit which stem from financial stress, versus those which originate purely as scams. A review of prosecuted cases indicates that the majority grew out of some type of a business problem, however mild. Arsons which were conceived as scams bear some different markings than those due primarily to financial stress: the financial records are too neat and seem to be too perfect to be "for real," the same public insurance adjuster may appear over and over (and perhaps the same insurance agents;) and the telltale signs of professional torches often remain.

The most difficult problem regarding motive is the mixture of some economic stress associated with the presence of a scam, for it requires that we ask whether the businessman who had a mild, seasonal problem allowed himself to be "sold" on an arson-for-profit scheme by a professional arsonist. Or, did an underworld fringe figure find out about a businessman's search for credit in a "tight money market?" Who originated the conspiracy, and who committed the first overt act to assure its consummation are two very critical questions. The answers point toward such issues as who should be targeted and who should be questioned first. The problem of identifying the motive in a combined mild stress/arson scam is a difficult one only because many owners whose property burns are in this predicament, and it is hard to determine whether they set the fire and arranged the insurance fraud themselves, or found some professional to assist them. The discussion which follows will cover some of the more commonplace financial stress and fraud scheme motives, and what kinds of steps would be appropriate for the investigator to take as a response.

1. Financial Stress as the Primary Cause

The home or business owner who decides to arrange an arson-fraud may do so out of submission to financial stress. However, the key factor in determining whether an insured will decide on arson is a function of that individual's moral hazard situation, or personal disposition to choose arson rather than some other outlet or form of relief. In general, two factors weigh primarily in the insured's decision to submit to arson-fraud: (a) the desire for financial relief, and (b) greed--the desire for easily obtained financial assistance.

One way to conceive of an arson-fraud scheme is to view it as the result of the interplay between these two factors. Experience in cases where owners have been caught in arson-fraud schemes indicates that the more extreme and immediately pressing the financial stress, the more morally hazardous that insured becomes. Certainly, the number of insureds who are not persuaded to commit arson--no matter how severe their financial stress--is great, and the swelling bankruptcy court dockets are one witness to the prevailing honesty of most citizens. However, a rapidly developing situation of financial stress can place the insured in a position where he desperately examines all kinds of options suitable to him--legal and illegal. The following discussion points to indicators which insureds in financial distress may leave behind in their arson-fraud schemes, and which can help the investigator establish whether distress alone, or in league with greed, helps to explain why a particular incendiary fire occurred.
A. Severe Personal or Business Financial Stress

Perhaps we can understand the arson-fraud motive of a homeowner who has just been fired or who faces mortgage foreclosure and burns his home or business. It is important to conduct a search for evidence of those forms of stress. The investigator is likely to find a great deal about such matters in court papers associated with divorces, foreclosures, bankruptcies, and liens. While it is not fully accepted as a rule of thumb, the more severe the financial stress of an insured, the more likely he is either to set the fire himself, or involve a minimum number of people—usually only a torch—in his crime. The reasons are simple: he may not have much money to pay them "up front," which they might demand, and he may also decide on arson so soon before it occurs that he forecloses the possibility of connecting with a professional arsonist.

Investigators often view real estate arson schemes as purely the result of the fraudulent motives of the owners. Actually, the motives for committing real estate arson split between those pure scams (discussed below) and those which result from the owner or landlord's deteriorating financial position. Financial stress in the latter instance can result from any number of factors: strong net migration out of the neighborhood, a long and expensive backlog of code violation citations and fines, or steady deterioration in the quality of the housing—sometimes by design of the landlords. Whatever the specific reason(s), housing which no longer produces net income for the owner or landlord can help place him (and perhaps his co-investors) in a morally hazardous position. Keys to determining whether the financial condition of a building or real estate corporation is such as to make arson-fraud attractive lie in the financial records of investment, income, and tax depreciation. These factors are discussed in the Appendix to the Tactical Guide, Economic Intelligence, by Mark Zanger, in Part II of this Manual.

B. Short-Term Business Problem

The businessman on the brink of insolvency faces financial stress that is more severe than the one who faces a short-term problem, such as a slack period in a seasonal business or an unforeseen problem of cash flow. Because of the regularity with which insurance settlements occur (when claims are not denied), the businessman who selects arson can be fairly sure of having much, or all, that he filed for in hand within a short period of time. One reason to suspect that a short-term business problem, rather than a more serious one, led to the arson is the absence of creditors threatening to force the owner into bankruptcy, and thus, the absence of a bankruptcy filing. An examination of the business' books, according to the ratio analysis techniques described in Campbell's Tactical Guide, Financial Investigation of Arson-for-Profit, (in Part II of this Manual), will enable the investigator (or accountant) to infer better whether the cash flow problem was the likely motive for arson.

C. Build-up of Slow Moving Inventory

A short-term cash flow problem can be caused by an unusually large build-up of slow moving inventory. While the inventory problem may not appear to the investigator to be a logical motive for the arson, this issue may be easier to understand if the investigator becomes familiar with what are normal or abnormal levels of inventory for a particular type of business, and for certain periods of the year. If an inventory problem led to the arson, it is likely that the insured has filed a full and possibly even inflated claim to recoup the value of the allegedly destroyed inventory. For this reason, such documentation may point toward the motive but in itself is insufficient to establish the motive. The investigator should look also for multiple points of fire origin and the attempt to destroy all inventory.
D. Outmoded Technology

Two of the largest arsons-for-profit prosecuted in this country involved industries which failed to keep pace with the technological progress of their competitors. The arson-frauds involving the Sponge Rubber Products Company (destroyed in 1975) and the Artistic Wire Products Company (destroyed in 1974) originated partly because the technologies for making the respective products had changed to more efficient, profitable forms. For whatever reasons, the owners had not kept pace. Where an industrial concern may be destroyed because of these technological problems, telltale signs of arson-for-profit are usually present. First, professional torches, even good ones, can rarely destroy a large industrial facility simply by burning it. Incendiary devices, sometimes involving explosives, may be required. Remnants and residues of these can often point to a "professional" arson job. Second, books and business records of the companies will often reveal financial stress in ways such as corporate debt reorganizations (Chapter 11 bankruptcies), as well as documented searches for new capital or drastic changes in marketing strategies prior to the arson. Third, since an owner involved in an industrial arson may claim that a labor-management grievance led to it, investigators should search for documentation on formally filed labor grievances, both with the local union and state and federal regulatory bodies, in order to confirm or deny the truthfulness of such a claim.

E. Satisfaction of a Legal or Illegal Debt

The businessman or homeowner whose property is destroyed by fire does not always broadcast clear signals of financial stress. One reason for this is that the source of the stress may not be apparent. It may not show up in the books of a business, or in other indicators such as divorce or bankruptcy records. For example, where the owner incurred an illegal loan sharks' debt which the lender has called in, the tremendous pressure and threats of violence can make an incendiary fire an acceptable risk to the business owner in such debt. On many occasions, the owner either sets the fire or arranges for it to be set. In others, however, the loan shark or his assistant sets it, knowing that the businessman has fire and perhaps other (e.g., business interruption) insurance in force.

Evidence of an illegal debt will be difficult to locate if the investigator follows only the "paper trail" from the insured to his business and personal records of transactions. Where arson to satisfy an illegal debt is suspected, it is important for the investigator to seek out information on the owner's actions which led to the indebtedness, e.g., a recent gambling junket, heavy betting during the sports season, or borrowing from a loan shark for a highly speculative venture which initially appeared to have enormous profit potential, but later went sour. Where the trail leads to an illegal debt involving the insured, but where he is convincing in his denial of any involvement, the investigator should examine the possibility that the loan shark arranged the fire without the insured's knowledge or consent.

In some cases that have come to light, the holder of a legitimate mortgage on a property who wanted to be paid has instigated the arson-fraud. In this variation of the motive pattern, the lienholder may foreclose, or announce the intention to foreclose, leaving the mortgagor (i.e., owner) in a position to seriously ponder arson-fraud as a solution. This type of arson-fraud may also occur when a "junior" lienholder (i.e., a second or third mortgagee) desires to obtain the value of the mortgage, but unbeknownst to the other mortgagees, and even to the owner. This type of arson-for-profit is discussed below under "Third Party Schemes."

F. Desire to Relocate or Remodel

Arsons do occur in businesses subject to quickly shifting consumer tastes, and this type of arson-fraud scheme may point to the motive of securing enough money to remodel or move. In
this way, the insured feels able to keep up with changing tastes, or to move to a more fashionable location with better market potential. Examples of businesses vulnerable to these trends are hair styling salons, "theme" restaurants, and furniture stores. Frequently, the owner arranges for the arson because he finally realizes that shifting tastes have caught him unprepared. However, an owner also may feel able to sense the onset of a new trend early enough to avoid financial distress—if he arranges for the arson to occur early enough to remodel or move by using the insurance proceeds. In cases where an inventory no longer sells because of shifting tastes, a variety of internal business and supplier records can help to establish whether or not this was the motive. In this type of arson-for-profit, as in many other types, the actual discomfort of financial distress may not be the actual motive as much as the perception that the insured will soon be in such distress—unless he "acts now."

II. Fraud Schemes as the Primary Motive

While many types of arson discussed above occur because of the actual or projected problem of financial stress, others result from schemes where there was not and probably would not be any financial problem. These types of arson fraud schemes are pure scams, and they result from the planning and plotting of professional fraud schemers and their associates. Their objective is to defraud insurance companies, as well as banks and even creditors, of as much money as possible. Some of the common types of pure scams encountered by investigators are discussed below.

A. Redevelopment

Where a defined tract has been designated for receipt of federal redevelopment funds, owners and investors may stand to make more money if existing buildings on the tract are razed at no cost to themselves. Arson is a convenient vehicle, for while it may not destroy the building, the city or redevelopment authority will usually raze the remains at no cost to the owner, especially if the building is a safety hazard. Investigators who study tracts designated for redevelopment can often plot which blocks and even which buildings may burn as a result of redevelopment fraud schemes. Owners who decide to arrange this type of arson realize that if the building is only partly damaged, the adjusted insurance settlement may pay for repairs (which they do not want) but not for rebuilding. Therefore, in the interest of ensuring maximum destruction, professional torches are likely to be called upon for their expertise.

B. Building Rehabilitation

In order to improve the condition of old or rundown dwellings, a variety of federal HUD loan and loan insurance programs are available for housing rehabilitation. Certain unscrupulous owners, contractors, and others who know the "rehab" business, realize that they stand to reap huge profits by obtaining funds to make repairs and then claim that the fire destroyed the rehabilitated unit. In most cases, either the claimed repairs were not made, or they were only partially completed, or were done with inferior (and cheaper) materials. Therefore, in addition to reaping a profit from that portion of the loan which was not used to buy materials and pay laborers, this type of arson schemer often files insurance claims for the full amount of the allegedly completed work. In addition to arson and insurance fraud, such schemers commit a variety of frauds against the federal or state government which provides the rehabilitation program assistance. Financial records should indicate the cost of the work actually done.

C. Real Estate Schemes

In many core urban areas, the most common form of arson-for-profit involves the destruction of dilapidated multi-family housing. While such housing is usually in an advanced state of disrepair, there may be little if any financial stress facing the owners. This is so because either the owner has recouped his investment through depreciation of
the building and through rent gouging, or the owner recently purchased the building for a small fraction of the amount for which he insured it. The typical modus operandi of this motive pattern finds an owner purchasing the housing for a small cash down payment, often accompanied by a large unconventional mortgage. The owner then sells the building to another speculator (usually an associate) for an inflated amount, again with little money down and a large mortgage. Often the building is insured not only for the inflated, artificial value of the second sale, but for the replacement value of that building, which is even greater. Then the building burns; the policyholder is almost routinely paid, and the speculating schemers split the proceeds according to a pre-set formula.

In order to reap the maximum profit from this type of scheme, the speculators often involve one or more kinds of specialists:

- Several torches, so that one torch will not know all about their schemes, and to avoid his becoming recognized through repeat trips through one neighborhood.
- A public insurance adjuster, to help inflate the claim on the building, as well as rental interruption and other types of insurance purposes.
- A realtor, who scouts around for cheap, "bargain" properties for the schemers to buy.
- An insurance agent, who may be corrupted, and who is helpful in insuring buildings far beyond what normal, reasonable underwriting standards would permit.

This type of real estate/arson scheme is very lucrative, and its perpetrators realize that the greater the number of buildings torched, the higher the profits. Soon other speculators, perhaps in league with a contractor or realtor, see how "well" the first speculator is doing, and out of greed the latter begin the same type of arson scheme, creating a "chain reaction." The idea spreads to still other speculators, and shortly an entire city can find itself in the midst of a real estate arson-for-profit epidemic.

D. Planned Bankruptcy

While this variation of arson-for-profit is not encountered very often, its incidence does seem to be growing. In a typical bankruptcy fraud, the owner establishes a business and buys quantities of goods on credit. He pays the first few creditors quickly and in cash in order to increase the volume of merchandise he can then buy on credit. The inventory is then sold, often surreptitiously through another company or to a fence, and then the business declares bankruptcy. Often, the creditors are left with large numbers of unpaid bills. One way to satisfy them is by paying them off with insurance proceeds obtained after a "mysterious" fire in the business. Additional money is generated from such a fraud scheme because the owner represents in his fire insurance claim that substantial amounts of inventory were destroyed, when in fact it was purposely moved out prior to the fire. Occasionally, a cheaper grade of merchandise is substituted in its place. Because the creditors are paid, their incentive to complain or report the probable fraud is reduced. Because the destroyed records of such inventory are hard to reconstruct, it is difficult to determine exactly what was destroyed in the fire, and hence its value. Also, since bankruptcy fraud fires always seem to destroy the office and files where the books are kept, it is difficult for the investigator to reconstruct the flow of money into and out of the business, as well as the flow of merchandise.

III. Arson Generated by Third Parties

This is another broad category of arson-for-profit where the beneficiary of the fire is not the owner-insured, but a third party who arranges for the fire out of some economic motive. Because the insured is really the major victim here, rather than the culprit, it is important for the investigator to determine whether a third party arson-for-profit did occur in order to avoid targeting the wrong individual(s). Examples of major forms of third-party arson are discussed below.
A. Elimination of Business Competition

This type of scheme arises out of the objective of someone who seeks to create or hold on to a business monopoly, or at least to maintain a competitive edge. Businesses most prone to this motive pattern are those which stand to suffer from too great a concentration of similar businesses in a limited geographic area. Examples include restaurants, taverns, and sex-oriented establishments (e.g., topless bars, bookstores, and massage parlors), which need to generate a large volume of business in order to make a profit. Increased competition can pose an economic problem to other such businesses in that area, which can cause some or all of them a degree of financial distress. Consequently, the financial records of a burned business may indicate the existence of financial problems which could lead the investigator to the mistaken assumption that the owner arranged the fire in order to obtain relief from that condition. Actually, in this example, a competitor more likely set the arson in order to improve his own situation.

The business elimination motive pattern appears to be more common where an organized crime figure maintains a financial interest in one type of business and either seeks the monopoly for himself or offers to hire out his services to create the monopoly for a client or associate in that business. In either case, it is important to involve investigators familiar with organized crime intelligence gathering and investigation where the elimination of business competition is suspected as a motive pattern behind arson.

B. Extraction of Extortion Payments

The identity of the criminal who drives out his competition by burning them out may not be known to the victim. On the other hand, the offender who demands extortion payments to let someone remain in business will necessarily identify himself (if only through his collector) in order to effect timely payment of the tribute. In this motive pattern, the arson may be a warning signal to a businessman to "pay up or else," or it may be a signal to other businessmen in that type of business to pay or wind up like the "example" of the burned-out victim. This motive pattern is similar to that found in the elimination of business competition, in that an organized crime figure or someone who wants to appear to victims as such a figure (e.g., a juvenile gang leader) is often behind this type of scheme. Investigators who suspect this motive pattern behind arson-for-profit should examine all of the related organized crime aspects, such as information on extortion payments in other similar businesses in the locality.

C. Labor-Management Grievances

Arsons in business establishments may be the result of an unresolved labor-management grievance for which the perpetrator felt there was insufficient redress or resolution. Investigators should be careful to distinguish whether this type of arson is part of a more regularized pattern of violent activity in that industry, or whether it could have resulted from a lone disgruntled employee. It is important to approach the possibility of this motive pattern carefully, for it can occur in an industry which is feeling the effects of an economic downturn, and where the management may logically be reluctant to accede to labor demands because of their cost. Therefore, the financial records of that business, as well as of that entire industry, may signal financial stress. In reality the arson may have been caused by an employee unsympathetic to that economic condition. Investigators who suspect this motive pattern should examine the history of labor-management grievances in that business by reviewing records of complaints filed with state and federal labor regulatory agencies.

D. Concealment of Another Crime

In order to conceal evidence of such crimes as burglary and embezzlement, perpetrators of those offenses have been known to set arson fires. In the case of a suspected burglary, the perpetrator might leave tools which were used to gain illegal
entry. If the building is only partially destroyed, the location of his entry may still bear signs of force. Where the motive was embezzlement, often the experienced embezzler is an inexperiencediresetter, and destroys only the business files or the room in which such records are kept. This may point directly to the concealment motive. Where embezzlement is suspected but the original books and records were destroyed, it is possible to focus the investigation on the reconstruction of those records. Duplicate sets of books (kept by the accountant), financial statements used to obtain loans, and tax returns may each shed light on the possible skimming of money from the business which occurred without the owner's knowledge or consent.

IV. Unraveling the Possible Mix of Motive Patterns

The home or business owner who burns down his house the day after a divorce decree, or the day before he files for bankruptcy, is fairly rare. Far more common are businesses which burn when that type of industry is beginning to enter a period of recession, and when the books thus reflect moderate—not terminal—financial stress. In these kinds of situations, establishing the most likely motive for the arson-fraud can be difficult and frustrating. Therefore, it is necessary to examine the steps which an investigator can take in order to narrow down the most likely motive patterns, and hopefully, to isolate the one which is most probable. In order to do this, a first step is to review three Tactical Guides to Arson-for-Profit Enforcement which are contained in Part II of this manual. They are Record Searches and Document Checks in Arson-for-Profit Investigations, by Harvey Schmidt (especially the section, "The Analysis of Research Information"), Interviewing Informants and Witnesses and Suspects, by Richard Condon, and Financial Investigation of Arson-for-Profit, by Loretta Campbell. When taken together, these three guides suggest the most likely forms of paper documentation and people who can lead to the most probable motive pattern. The documentation is a key component of the "paper trail" which arson-for-profit schemers usually leave behind them, and the associates and confidants (the people) around them likewise have considerable information on reasons why an insured might commit or arrange an arson-fraud, or become the unwilling victim of one.

The chart which follows presents in brief summary form those kinds of people and documents which are most likely to reflect information on motive. The presence of some documents, more than others, are good, direct indicators of a fraud, economic stress, or combined fraud-stress motive. Other people and documents are more remote indicators and provide only a glimpse as to possible motive. The chart is intended merely as a guide to assist the investigator in designing an approach to undertaking the first, second, third, and subsequent steps in determining motive.
People and Paper which Figure in Action-for-Profit Enforcement

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KEY:

OUTER CIRCLE: Some indication of motive.

MIDDLE CIRCLE: Fair indication of motive.

INNER CIRCLE: Strong indication of motive.
CHAPTER 3: ROLES AND VULNERABILITIES OF ARSON-FOR-PROFIT SCHEME PARTICIPANTS

Introduction

An arson-for-profit can be committed by anyone from an owner who burns his own business and files his own fraudulent claim, to a twenty-member ring whose leader picks and chooses a team of specialists in response to the needs of each fire. In order to zero in on the most likely motive and to begin building the case once that motive has been established, it is important to know what types of specialists contribute their skills to each type of arson-for-profit scheme. This chapter focuses on the two categories of arson-for-profit schemers: (1) primarily criminals who become involved, for one reason or another, in an arson-for-profit scheme, and (2) primarily legitimate business figures, whose knowledge of business and financial practices enables them to execute a profitable arson-fraud. In order to assist the investigator in thinking about building the arson-fraud case, the description of each type of participant is followed by a discussion of some strategic investigative vulnerabilities which stem from the kinds of criminal acts which that participant most likely committed.

I. Participants with Primarily Criminal Backgrounds

One reason why arson-for-profit is such a difficult problem to control is that criminals from many underworld backgrounds have discovered the high profits and low risk of punishment here. The world of street crime contributes many petty burglars and other thieves who become torches. More experienced burglars, as well as their fences, hail from the world of professional theft crime. Many forms of white-collar crime involve the falsification of financial documents, and experts in that mode of activity find that their skills dovetail nicely with the insurance and related bank and credit fraud aspects of arson-for-profit. Organized crime figures are
noted for their skills in enforcing gambling, loansharking, and prostitution monopolies, and the extortion skills from those endeavors carry over to efforts to control tavern, restaurant, and pornography enterprises by using arson to drive out competition or get non-paying victims to pay. Organized crime figures also own or have financial interests in legitimate businesses which may be managed poorly, or fall on hard times for other reasons. Arson-fraud becomes a welcome solution to the organized crime figure, just as it can to the unscrupulous businessman or landlord.

In many cases, arson-for-profit schemes show traces of more than one field of criminal expertise, and for that reason are more difficult to investigate. The white-collar crime investigator needs to know about professional theft and organized crime, and each of those disciplines needs to know more about the others in turn. Because investigators normally keep fairly well within the confines of their own disciplines, arson-fraud schemers who come from many modes of criminal enterprise have remained beyond arm’s reach, and therefore are free to continue their illicit operations uninterrupted. A central purpose of this section is to persuade the investigator that the mix of underworld disciplines active in arson fraud schemes requires an equally broad and integrated mix of law enforcement skills.

A. Torches and Master Torches

In arson-for-profit, torches ranging from amateurs to professionals are the most familiar criminal specialists, yet in many ways they are the most difficult to apprehend. One reason for this difficulty is that many torches are recruited from the ranks of burglars and other petty thieves who know how to "case" a neighborhood and building, and how to enter and exit at night without being noticed. Another is that the "technology" required to set incendiary fires is very basic, and the use of gasoline or other available accelerants leaves few traces which automatically point to a particular torch. A third reason is that the requirements of proof for most arson statutes involve a showing of exclusive opportunity to set the fire, and it is the owner-insured, rather than the torch, who is the most likely target because he is the one whose identity is known from the outset of the investigation. However, when the arson is contracted out to a torch (amateur or professional) the question of who had exclusive opportunity to set the fire becomes very difficult to answer.

1. Specialization. Torches do specialize according to the types of structures which they burn. This seems to be largely a function of their familiarity with a certain section of a city or with certain types of housing or commercial establishments. A further distinction can be drawn among amateur, semi-professional, and professional torches based on their use of timing devices, accelerants, and explosives.

The professional torch is knowledgeable in the sophisticated use of timing devices, chemicals which do not leave an easily traceable accelerant pattern (as does gasoline), and explosives used in burning commercial structures. The semi-professional torch is adept, e.g., in the proper and relatively safe use of gasoline and paint thinner as an accelerant, probably with the use of trailers. He has some basic knowledge as to the necessity of proper ventilation if a building is to burn successfully, despite a large or moderate presence of the proper accelerants. The amateur torch is a one-time, or in a number of instances, experienced torch who simply uses a relatively small quantity of gasoline and immediate ignition devices such as matches or railroad flares.

The amateur lacks knowledge as to the true burning characteristics of fire, ignition devices, chemicals, and explosives, as well as an unsophisticated approach in terms of the evidence left behind and the relative dangers in immediate ignition of an incendiary fire. Thus, many amateurs kill or burn themselves.

While most torches are known to boast about their professional expertise, the handiwork of those who are more
amateur than professional can be seen in cases where adjacent buildings were badly damaged or firefighters injured or killed. Very often, the use of extraordinary quantities of accelerant which pose a serious danger to firefighters and occupant life safety are signs of amateurs. One hallmark of a true professional is the total engagement of the target premises (and no damage to another) by the time the fire service arrives. What may be deceiving is the first try of a torch experienced at setting multi-family residential fires, who tries his hand at an industrial facility and comes wide of the mark through the use of too much gasoline or explosives improperly placed. Such a torch is not really a rank amateur per se, but one too new to the type of structure he is trying to destroy to do so effectively.

As torches progress in their criminal careers, many graduate as they grow older into planning and supervisory roles. These individuals may be termed "master torches," and normally they act as prime contractors for the owner or fire broker and procure others to commit the actual incendiarism. Because of the experience which they build up over the years, master torches should (if they are proficient) know just how much accelerant to use and whether an explosive device may be needed. Because they act as a prime contractor, they frequently serve as middlemen between the actual torches who set the fires and the fire brokers and/or owners. It is also not uncommon to find a fire broker whose fascination with incendiary crime leads him to assume the additional role of master torch. In so doing, the fire broker brings increased specialization to his task without the added cost of a separate specialist. However, he also increases his vulnerability because of additional interactions (with torches, owners, etc.) where he must of necessity discuss specific plans for the fire. If master torches are at all active in a jurisdiction, they will likely be located strategically enough in a conspiracy to implicate others involved with them.

2. Payment arrangements. The torch is usually paid a flat fee, rather than a percentage of the insurance, for his service. Professional torches, and especially the very good ones, normally command between $1,000 and $5,000 per arson fire. The fee for semi-professional torches will normally range from $500 to $1,000, and amateurs usually receive between $100 and $500. In contrast to the fortunes which other fraud schemers make in arson-frauds, the torch--certainly a key specialist--may seem in comparison to be underpaid. This phenomenon has several explanations. First, the torch is usually paid in cash, with a "good faith" down payment prior to the fire, and the remainder afterwards. As in most business deals, payment in cash is something of a premium, and for offering the payee (torch) the convenience of hard cash, the payer discounts--pays a lesser amount--than if the other party to the transaction had to wait impatiently for his money. Second, the amount paid to a torch has to be seen in the economic context in which it occurs--an environment governed by the simple law of supply and demand. In any jurisdiction there are enough freelance torches so that the availability of this essentially cheap, semi-skilled labor has the impact of driving down the price which any one torch can command. If the price for a commercial business is $1,000, and a torch who is asked to set that fire refuses, demanding $2,000, the owner (or pigeon) merely says, "Ridiculous--too high; see you around!" and proceeds to find one of the many other equally competent and trustworthy torches who will set the fire for the prevailing wage. Third, torches are basically freelance underworld fringe figures, handling perhaps a burglary here, a fire there. While many of them do not exactly live hand-to-mouth, the irregular and often unpredictable demand for their services makes almost any arson offer attractive--especially because it carries the promise of quick payment. This is another factor which drives down the price of the torch.
Surely there are examples which an investigator may cite of a torch reportedly paid upwards of $5,000 for a fire, or possibly 10 percent of the insurance settlement. Such apparent exceptions to the rule can be explained. Basically, the deal which a torch strikes with an owner is a bargain between the two of them. Where there is no organized market for the services of a torch, or where the owner is naive and does not know how to check on the prevailing fee paid to torches, he enters the fee negotiation with so little background on this type of business transaction that he may end up paying far more than he really had to. One reason for the attractiveness of pigeons and fire brokers to owners is that these specialists—who market the commodity of information—help the owner understand what he will have to do to execute an arson-fraud, and how much he can expect to pay for "quality" workmanship. Just like the upperworld of legitimate business, the owner pays the broker or pigeon a consideration for making him privy to this valuable, highly technical information on prices and quality of workmanship. However, the isolated owner may not know how to find such expertise, or may be too frightened to even look. Hence, he ends up being "gouged" by the torch who may be a cunning businessman in his own right.

3. Recruitment. Torches come from many underworld quarters, but they are mainly fringe figures in crime who perform a variety of usually dirty, manual tasks. Many either double as drug user/dealers or burglars, or got their start earlier in burglary or other petty thieving. Others entered arson because they were seasonally unemployed as lower level fringe figures in white-collar or organized crime, or in a legitimate business (such as contracting) where they rubbed shoulders with financial schemers always looking for torches to do the hazardous, dirty work of setting fires. There are reports that many torches have a violent streak which causes them to enjoy the damage done by incendiary fires. Those who describe such torches also point to their frequent eagerness to serve as underworld enforcers who especially enjoy such tasks as threatening or beating loan shark borrowers who are in default. Altogether, too few torches have been caught to permit an objective study of their psychological motivation.* Clearly, their economic motivation--of which we know far more—goes a considerable length in explaining this criminal behavior.

4. Vulnerabilities. Strategies to apprehend torches normally rely on the search for eyewitnesses who might have seen the suspect or his car in the vicinity of the building around the time of the arson. Another strategy which is employed because witnesses are so hard to find involves a central focus on the owner and a secondary focus on getting the owner, if implicated, to identify the torch. Both of these efforts pose extremely difficult tasks, primarily because of the circumstantial nature of the evidence available to incriminate the torch, whether as a primary or secondary enforcement target. Some circumstantial evidence against the owner and some against the possible torch often do not add up to enough to charge either. This is an enduring dilemma in arson-fraud investigation.

One alternative strategy which the investigator might consider is to develop intelligence on the criminal activities from which torches are recruited in that community. To recoup, the nature of the torch's occupation is such that he is usually paid a fixed fee for the fire, rather than a percentage of the eventual insurance settlement. Therefore, the owner-insured (or whoever else hired the torch) is happy to see him on his way after the fire. Few owners, or others who arrange an arson fire, impart information on the business operations or their insurance coverage to the torch because the torch normally

*A research effort is underway at the FBI Academy to compile psychological profiles of professional arsonists. Those interested should contact Special Agent Tony Rider, FBI Academy, Quantico, VA 22135.
remains an unknown and thus untrusted quantity. Further, torches are often on the fringes of violent street or petty theft crime, and no owner wants this type of person around longer than necessary. Because so many torches operate independently, more or less engaged in a "free lance" criminal occupation, the torch has to market his own services. In order to market, the torch has to advertise—by word of mouth. Because the torch advertises by word of mouth, many potential clients, as well as other specialists who help arrange the arsons and frauds, overhear information which they will not use, and thus which is of little value to them. Because so much "free" or "cheap" information about torches is circulated in this way, investigators can develop intelligence collection plans aimed at the locations which serve as clearings for burglars, fences, torches, and those who arrange criminal transactions for which "recruiters" seek to find and look over potential specialists for third parties. Obviously, the investigator knows of certain taverns and night spots where such people congregate. A related strategy is to develop intelligence on torches by interviewing those who are familiar with the other criminal activities of torches. These include people active in the drug trade, fellow burglars, as well as fences (who are discussed more fully in the following pages).

Another strategy is aimed at using information regarding the characteristics of the arson fire to distinguish the type of torch involved. Crime scene and laboratory analyses are crucial to the development of a profile of the likely torch who set each fire. While the field of crime investigation is not yet an exact science, investigators may see patterns of similar types of fires occurring (including the use of particular ignition devices, accelerants, or explosives) which point to a particular type of torch. The use of such a strategy will help the investigator evaluate the torch in the proper perspective, rather than over- or under-estimating the torch's knowledge and expertise. This is particularly important if an attempt is going to be made later to "turn" the torch into a witness.

B. "Pigeons"

A community will begin to experience an arson-fraud problem when owners begin to look for and find torches, and vice versa. However, all that a community needs to experience an arson-fraud epidemic is the introduction of a type of middle-man who helps the owner find a torch. That specialist is the "pigeon," a word which in underworld terminology usually refers to someone who steers a person in need of money to a loan shark. Pigeons rarely surface in obvious ways in arson-fraud investigations because they do not show up in any of the property or insurance transactions recorded on paper. Also, owners are either reluctant to divulge their identities, or owners (and torches) are not asked about the possible involvement of pigeons. For these reasons, pigeons have come to enjoy tremendous anonymity in many of the cities where they are active.

1. Specialization. Specialization among pigeons occurs because certain types are closer to one or another type of legal or illegal activity where they readily find people in need of money. Some pigeons follow high-stakes gamblers or groups which travel on gambling junkets, and they steer the big losers to loan sharks or perhaps directly to an arsonist. Others hang around traditional bar and night spot underworld haunts hoping to glean information on someone in need of quick money. Still others make the rounds of certain types of businesses where tight money conditions or adverse business trends may create the need for a "way out" of a business problem. While it is common for a pigeon to pick one type of specialized clientele, those who are particularly enterprising may try to service two or more.

Like the other specialists involved in arson-for-profit schemes, pigeons learn their trade from their senior peers—those with more experience in this field. Like the other specialists, the pigeons deal in the commodity of information. The constant question is, "Who needs money, and
who can arrange a fire in order to effect payment of the insurance money?" As a dealer in information, the pigeon becomes a true professional when his information sources on clients and torches become extensive and accurate beyond a fault, and when he can almost guarantee someone that when he steers them to a torch, the torch will do a professional job (i.e., effect complete destruction with no one hurt) and that a hefty insurance payment will follow. In a word, the professionalism of the pigeon is a function not so much of what he knows, but who he knows.

2. Payment arrangements. The ways that pigeons charge and are paid for their services seem to vary widely. Because the pigeon is paid for the standard service of putting a client in touch with a torch (at which point his service ends) most pigeons are paid a "finders" or "referral" fee; normally up front and in cash. Far less frequently, the pigeon receives a percentage of the insurance settlement. The reason for the latter is that the pigeon, like the torch, is rarely brought into the inner fold of an arson conspiracy, and the central conspirators do not want anyone hanging around anxiously waiting to be paid—and complaining until they are paid—if they can avoid it. So, they solve the problem by paying the pigeon up front. Not all pigeons demand a fee, especially if they are in that sordid business to "rub shoulders" with underworld figures and derive some type of psychological gratification from it. A token meal or round of drinks will normally satisfy this type of pigeon; and still others may be pleased to help out a fellow compatriot in their own ethnic group, business group, or neighborhood.

3. Recruitment. Pigeons come from many walks of life, but most of them either want to be, or cannot avoid being at the fringes of professional, organized, or white-collar crime. As such, pigeons are considered fairly low to middle-level functionaries by more sophisticated underworld figures. Some pigeons are heavy gamblers themselves, and steer other losers to torches as a way of working off their own debts. Others are businessmen involved in marginal white-collar crime or fencing activities which grow out of their legitimate business operations. In these types of cases, it is always helpful to the businessman-pigeon to generate goodwill by steering a friend or associate to someone (i.e., a torch) who can help "solve" his business problem through arson-fraud.

4. Vulnerabilities. When one looks at the broad spectrum of specialists who become involved in arson-for-profit, the pigeon is one of the more puzzling figures. This is mainly because the pigeon remains anonymous throughout the investigation. This is due to the fact that torches and the owner-insureds are rarely caught, and thus they do not divulge the pigeon's identity. Further, since pigeons usually do not visit the premises to be torched, are normally paid in cash before the fire, and soon fade again into the background, they do not surface in ways that a white-collar crime, arson, or police investigator might notice them. Regarding strategies which may be used to target pigeons, investigators might consider intelligence gathering programs on pigeons who work gambling and loan shark operations in an effort to determine whether such pigeons also function to steer clients to arsonists. Another approach is more elaborate and involves using either the owner or torch, once apprehended, to divulge as part of a bargain the identity of the pigeon. (Strategies to attack these more organized arson schemes are discussed in the next chapter.) However, on balance, investigators can expect it to be as difficult to make a case against the pigeon as an "accessory before the fact" of arson, as it is to make any other type of accessory case.

C. Fire Brokers

The presence of pigeons who steer owners to torches can help create an arson-for-profit epidemic in a community, but the presence of fire brokers will assure that the frauds will be far more profitable. Fire brokers serve the function of
bringing the client and torch (as well as other specialists) together. Unlike the pigeon, the fire broker continues to work with the owner and other specialists after their initial meeting to assure maximum fire damage, to arrange for false books or bookkeeping entries, to pad the inventory records, and to arrange for the inflated insurance settlement. What the fire broker provides, which the pigeon, owner, and torch working together usually cannot, is white-collar crime expertise that makes an average scam into an enormous, highly profitable one. The fire broker does this by recruiting, on an as-needed basis, those specialists who will contribute something to the arson, insurance, or other related financial fraud. If the fire broker is skillful and chooses to do so, he may be able to arrange it so that each specialist performs his task without many--or even any--of them knowing what the others are actually doing as part of the scheme.

1. Specialization. Fire brokers fall into two categories. In the first category are fire brokers who specialize in one of two types of arson-fraud packages: (a) pre-and-post arson, and (b) post-arson. The pre-and-post fire brokers are usually aggressive, illicit "salesmen" who seek out businessmen who are in financial stress, or who are worried about possible future problems. Often the businessman (or perhaps landlord or homeowner) is looking only for relief from an immediate problem, but the pre-and-post arson broker works on the potential client to persuade him that an arson-fraud scheme will bring, in addition to fairly immediate relief, a windfall source of interest-free capital that he may invest in one or more additional business ventures. On the other hand, the post-arson fire broker comes into the picture subsequent to the fire which the owner himself set or arranged to be set by a torch. The post-fire broker provides the service of arranging the inflated, fraudulent claim, by helping to pad the business records and by generating or substituting false documentation of business volume, inventory, etc.

A second criterion that distinguishes among fire brokers is the type of buildings and businesses they handle: (1) commercial, (2) residential, and/or (3) industrial. It is common to find fire brokers (both pre-and-post and post-arson) who will handle more than one type of fire (e.g., residential and commercial). However, fire brokers usually begin their work in this criminal field by specializing in one type of fire because of some access they have to information on the business problems common in that type of concern, or because the torches and pigeons with whom they hook up are familiar with a distinct and well-defined clientele of business or residential owners.

2. Recruitment. Fire brokers in all specialties have one factor in common: they were active in some form of white-collar crime before they moved on to arson. Typically, it involved the defrauding of some large institution (e.g., banks, creditors, or government programs). Often, arson-fraud schemes evolve fairly logically out of prior bank loan and real estate fraud schemes. What does a schemer do to make even more money after he has obtained large mortgages on relatively worthless properties? A logical answer to this would be arson-for-profit.

3. Payment arrangements. Unlike torches and pigeons who charge a flat fee, fire brokers usually take a percentage of the insurance settlement for their services. They are able to set such terms for a number of reasons which are tied to a scale of the amount of destruction and fraud. First, if they are pre-and-post arson brokers, they see the scheme through from beginning to end. Second, as a usual selling point to the owner, they promise an insurance settlement far beyond anything the owner might have expected had he prepared the proof of loss forms and supporting documentation himself. Third, because the fire broker (whether pre-and-post or just post-fire) helps arrange preparation of the false proof of loss forms, he knows how much insurance is in force on the building, contents, and perhaps business or rental interruption. Therefore, he is in a
strong position to know what portion of the settlement, after he is paid, would still leave the insured with an overall profit. The torch and pigeon are normally not in a position to know that much about the insured. Consequently, it would be hard for them to demand a percentage of an undisclosed amount.

A review of the activities of one major arson-fraud ring, which operated in at least five states, indicates that the fire broker's fee ranged between 10 and 20 percent of the overall insurance settlement. The exact percentage he charged depended on such risk factors as proximity of the business to occupied housing (which required a more "professional" torch job) and the amounts of additional insurance for inflated values which the fire broker helped the owner place through a "friendly" insurance agent.

4. Vulnerabilities. Because the fire broker is the one who recruits the other specialists for an arson-fraud, both his identity and incriminating transactions are known to other specialists—and most logically to the torch, business partner, probably the bookkeeper/accountant, and the public insurance adjuster. Because the fire broker's value to the owner lies in his ability to manipulate business records, loan applications, and insurance forms, the fire broker is the one who causes the paper trail of fraudulent documentation to be set into motion, although he usually works through the owner or public adjuster to prepare, sign, and submit the documentation. Because the fire broker brings much white-collar crime expertise to this field, he is vulnerable to white-collar crime investigative approaches, and to prosecution on a variety of criminal statutes such as state larceny and fraud, and federal mail fraud charges.

Because fire brokers often remain in the background in contrast to the visibility of the owner, partners, and the public adjuster, one law enforcement strategy might be to focus on one or more of the other scheme participants who more directly generated, or helped to generate, the fraudulent documentation. For example, if the public insurance adjuster is caught for bribing suppliers to falsify invoices for goods allegedly destroyed, but never delivered to the premises, then the public adjuster might cooperate by identifying the fire broker and perhaps the other scheme participants of whom he had knowledge.

The investigator should be cautioned, however, that fire brokers are usually very cunning, astute career white-collar criminals, and they are very capable of insulating themselves as they move from one scheme to another so that participants in one may not know much about the participants in another. Many fire brokers operate as the decision-making hub at the wheel of an arson scheme, with communications and orders radiating out from themselves to each participant. In this way, the broker keeps most or all of the other scheme participants unaware of the specifics of the illicit transactions, and sometimes even the identities, of the others. In other situations, mainly encountered in real estate arson schemes, the fire broker and most or all of his specialists work together as a team, and one member comes to know, directly or indirectly, the illicit transactions of the others.

D. Organized Crime Figure

The organized crime figure poses a difficult problem in arson-for-profit investigation because his motive pattern can change from time to time. He can enter this field for any one of a number of motives: to create a monopoly over some type of activity; to collect on a gambling debt here or a loan shark debt there; to create a specialized racketeering enterprise which can be hired out on a contract basis; or to burn one of his (or an associate's) legitimate business investments, should it go sour. For another set of reasons, the organized crime figure is difficult to apprehend. Unlike many types of white-collar criminals, organized crime figures may threaten or kill potential witnesses. They may also import key specialists such as torches from hundreds of miles away, and this makes the
task of identifying the firesetter through modus operandi analysis, or even with an eyewitness, next to impossible. However, results of a number of prosecutions made against organized crime figures provide some information about their arson-fraud activities.

1. Specialization. Because organized crime figures normally run many legal and illegal businesses, and some have nationwide connections, they do not need to specialize in any one form of arson, or deal with one particular type of business or area of the city. Where they do show signs of specializing, it is usually in a specific type of business, such as taverns, about which they become familiar due to their underworld operations. They may become involved because of a default on a loan shark debt, or because one of their restaurants fell on hard times. Where there are patterns of organized crime involvement in arson, however, they usually result from efforts to gain an illicit monopoly over some type of licit or illicit business.

2. Payment arrangements. Because organized crime figures arrange arson fires to satisfy an outstanding debt or to recoup one of their own investments, their concern is to obtain the full insurance proceeds for themselves. The issue of a payment arrangement when an organized crime figure is involved is usually determined on a case-by-case basis by that organized crime figure.

3. Recruitment. Obviously little new needs to be said about where and how organized crime figures get their start and why they enter arson-for-profit. Clearly, they enter this field because large sums of money can be made with relatively little work. One reason we do not see more organized crime activity in arson-fraud is because organized criminals are more comfortable with traditional kinds of activities which they can monopolize through other forms of raw or subtle coercion. An assault, threat, or murder is a private act; arson is a more public one—visible to the press, prosecutors, and perhaps an outraged or fearful public. Arson-fraud is also difficult to organize and control because anyone can start fires for a fee, and one needs only some gasoline and access to owners with insurance coverage (i.e., just about everyone) to make money at it. Therefore, organized crime figures would be unwise to declare a monopoly over arson-for-profit in an area. In order to enforce that monopoly, they would have to threaten or kill perhaps hundreds of people, and still they could not stop someone from burning down his own business for insurance proceeds.

The organized crime figure will tend to recruit strong-arm assistants from within his own ranks rather than rely on outside arson-specialists. These strong-arm men are often relied on to take care of the details of the arson fire.

4. Vulnerabilities. Organized crime figures are not easily vulnerable to law enforcement strategies designed to apprehend them for arson activities. As they do in other areas of racketeering, they insulate themselves through layers and layers of intermediaries. Should it appear that someone is going to implicate them in an arson-fraud scheme, the organized crime figure is accustomed to ordering the silence of the informant or witness, through one means... or another. And, they can always "give him an offer he cannot refuse."

Despite these obstacles, the investigator can focus on two potentially vulnerable areas in arson schemes involving organized crime figures. First, because the organized crime figure may rely heavily on strong-arm assistants, a series of organized crime related arson fires may be very similar in modus operandi, type of business targeted, or some other characteristic. Recognizing such a pattern will assist the investigator in developing the most appropriate investigative strategy. Secondly, although organized crime figures insulate themselves in arson schemes, the extent of insulation is often less than their more traditional endeavors. Whenever a fringe organized crime figure is arrested, for whatever reason, he
should be questioned, if possible, about his involvement in arson schemes. In those few cases where organized crime figures have been implicated in arson schemes, they were incriminated by other syndicate members who worked for them, and who were convicted of a serious murder or extortion charge. As part of a bargain to obtain leniency, the lower level organized crime figures incriminated their leader in the arson-fraud scheme. Since this type of case is likely to grow out of a protracted homicide or organized crime investigation, law enforcement personnel might consider forming or joining cooperative task forces with organized crime investigators.

II. Participants Engaged in Legitimate Business Activity

The previous discussion emphasized that an arson-fraud can be executed by anyone from an owner of a business or dwelling acting alone to a multi-member ring. Just as a number of underworld specialists in arson-fraud may join the owner in a scheme to increase its profitability, so may one or more experts from various areas of the legitimate business world join in. A primary reason we should expect to find such specialists in arson-fraud schemes is that they know, perhaps better than anyone else, how the financial systems which they seek to defraud actually operate. Realistically, the financial expertise required to design and execute a lucrative arson scam is available in almost any community through the skills of a few key corrupt individuals. The corrupt participant may come from a field such as insurance, institutional lending, and real estate, with others occasionally participating from disciplines such as accounting, building construction, and contracting.

While the previous discussion on motive patterns focused on the roles of the criminal specialists, their modi operandi, and vulnerabilities, the role of legitimate business participants should be understood in order to deal with them when one of their numbers is found to have corrupt involvement in an arson-fraud scheme.

A. Business Partners and Employees

An individual owner's decision to enter an arson-fraud scheme is often not entirely his own. When left to his own preferences, an owner may be fearful of crossing the line into illegal behavior. Others might want any way out of their pressing business problem but may not know where to look for assistance. While it would be incorrect to suggest that business partners are the real culprits lurking behind the scenes in arson scams, such associates often provide the owner with a forum within which any number of legal and illegal options can be discussed. Because the owner normally entrusts his partner or employee with a lot of sensitive business information, the owner may explore the prospect of an arson-for-profit early enough so that the partner knows at least of this important change in the owner's condition of moral hazard. Whether or not the partner or employee is later made privy to the specific, final plans for the fire and subsequent fraud is an important question for the investigator, but important as well is the circumstantial evidence which the partner could provide on the owner's beginning search for a possibly illegal "solution." Where the owner and partner together design the arson-fraud scheme, the nature of the split of insurance proceeds may parallel the split in original interest in the business.

In certain cases, partners or employees may be made privy to the arson-fraud scheme by the owner, but may disagree with it. They may do this out of an attachment to that job or particular business concern, or out of apprehension over finding a suitably comparable position after the fire. Whatever the reason for their resentment, partners and employees who know of a planned arson-fraud may carry that attitude with them for a long time. However, having no further voice over the matter, the partner or employee may reluctantly go along, if only to benefit from a share of the insurance proceeds. In such cases, these partners and employees may
cooperate in the investigation, if approached and questioned correctly.

B. Bookkeepers and Accountants

Investigators with experience in applying white-collar crime investigative techniques in arson-for-profit cases note the often central importance of bookkeepers and accountants. The degree of expertise which these financial specialists can develop (sometimes from experience with "doctoring" the business records for tax evasion purposes) can make them among the most expert of all of the co-conspirators who become involved in an arson-fraud scheme. Therefore, the investigator should be aware that the bookkeeper or accountant who joins forces with the owner in an arson-fraud scheme may reflect complete self-confidence, mainly because he feels that the investigator is a "layperson" who is unfamiliar with the discipline of accounting and will be unable to pick up and make sense of his fraudulent paper trail. Actually, any financial specialist who has made either entries in, or a whole set of, fraudulent books leaves traces—although it may take an experienced investigative accountant to identify and follow them.

Bookkeepers and accountants are important participants in arson-fraud schemes because they can lay important groundwork for the eventual insurance and possibly related (e.g., creditor) frauds. First, they can arrange for false documentation on the delivery of merchandise or equipment allegedly destroyed in the fire, but which never was delivered. Second, they can falsify the books to make it appear that the business concern was doing a much stronger volume of business at the time of the fire than it really was, in order to inflate the payment of the business interruption insurance. Third, the bookkeeper can help disguise the skimming of money from the business in order to pay the torch, perhaps the pigeon, and assorted other schemers the amounts they demand as their "up front fee," or "good faith" down payment. Clearly, a business' financial specialist who knows some or all of the above incriminating information is in an important position to help investigators, yet the frequency with which such personnel are targeted—or even thoroughly questioned—does not reflect their potential importance in arson-fraud inquiries. When to approach these financial specialists, and how to secure their cooperation are issues discussed in the following section on "Enforcement Strategies" and in the Part II technical papers by Loretta Campbell (on Financial Investigation) and Richard Condon (on Interviewing).

C. Coaches and Advisors

Sometimes the impetus for an arson-fraud scheme comes from a friend or associate in the same type of business, who perhaps has had an arson fire and profited considerably from it. Such a person serves in a coaching or advisory capacity to help the owner prepare his records and premises for the fire. The coach or advisor may also help the owner find a reliable torch, or he may even tell the owner how to set the incendiary fire himself. Coaches and advisors usually provide such assistance out of friendship, to repay a prior extension of some favor, or simply to generate goodwill with the owner who is currently thinking about arson. Because of this motivation, the coach or advisor normally does not receive any money for this important service.

The exception to the no-fee arrangement is the coach or advisor who formally serves as the owner's attorney. Because the owner probably had prior conversations with the attorney regarding such issues as debt consolidation, filing bankruptcy, and related actions, the attorney may feel he has an open invitation to suggest a more drastic, illegal remedy such as arson. Known instances of such illegal advice by attorneys are rare, but this should not dissuade the investigator at least from looking into the possibility of such coaching by an attorney. One reason to do so is the prospect of a hefty insurance settlement which is an assurance that the attorney
has of being paid for much of his prior consultation on business-related legal matters. For another, the owner who emerges from an arson-fraud scheme in a highly solvent position is better able to enter a new business for which he may well need the continued legal guidance of that attorney.

D. Public Insurance Adjusters

While the pigeon is the criminal specialist whose presence normally signals the existence of organized arson-fraud, the legitimate sector specialist whose occasional corrupt presence is equally ominous is the public insurance adjuster. Because the role of this figure is so often misunderstood, it is important that at the outset the investigator know that a public insurance adjuster is different from an insurance company claims adjuster. While the claims adjuster works on either a staff or fee basis for an insurance company, the public adjuster works for the insured policyholder (i.e., for members of the public at large and never for an insurance company). The public insurance adjuster assists the owner-insured in the preparation of his claim form and, more specifically, in the preparation and documentation of the proof of loss form. The public insurance adjuster (often referred to as the "public adjuster" or "PA") is similar to other types of businessmen who sometimes become involved in an arson-fraud scheme: the majority who are honest seem to be eclipsed in importance by the minority who join forces with the owner and other scam specialists to provide false, inflated proofs of loss.

Public adjusters can become involved in an arson-fraud scheme in a number of ways. First, public adjusters can become known through their reputations as real hustlers to owners who act alone to set or arrange an arson-fraud. Because the public adjuster operates as a legitimate businessman, he is listed as such in the telephone book, and is easy enough to find. Second, public adjusters may work with another arson-fraud schemer--most commonly a pigeon or fire broker--to pick up where the other leaves off. Normally, a public adjuster who enters an arson-fraud conspiracy in its early stages will begin at that time to arrange for the preparation of the kind of false bookkeeping entries, inventory records, and other documentation that will inflate the fraudulent insurance claim. He may do this on his own or work with the bookkeeper or accountant. A corrupt public adjuster can also be expected to arrange with one or more suppliers of the business (depending upon the nature of that business) to prepare false and often backdated invoices for merchandise, raw materials, or finished goods which the public adjuster will use in preparing the false proof of loss form. While the owners will claim that the goods or materials were destroyed in the fire, often they never were delivered to him, or were moved out and sold prior to the fire.

A third variation finds the public adjuster serving as a quasi-fire broker, and using his contacts in the underworld and business communities to alert him to people in financial trouble, whom he later approaches. This variation is less common because it radically increases the public adjuster's profile of criminal acts, and thus heightens his vulnerability as an enforcement target.

Regarding payment arrangements for their services, public insurance adjusters (honest or otherwise) normally operate on a contingent fee basis with their client, the owner-insured. Typically, they charge between 10 and 20 percent of the adjusted insurance settlement. In order to obtain business on a regular basis through a pigeon or fire broker, the corrupt public adjuster might pay roughly 10 percent of his proportionate fee to the pigeon or broker as a kickback for having that particular business sent his way.

E. Insurance Claims Adjusters

The claims adjuster who works for an insurance company, whether as an employee or independently on a fee basis, often makes a determination as to fire cause. Thus, his judgment is
extremely important in a company's decision whether to approve or to deny payment of a fire-related claim. Occasionally, an adjuster will enter an arson-fraud scheme by agreeing to alter his report on either the fire cause or information on a possible fraud motive. For this, the corrupt claims adjuster is usually paid a fee (a commercial bribe) in order to delete, add, or distort information which is then sent through insurance company channels as part of the official claim file.

F. Insurance Agents or Brokers

If there is anything which frustrates an investigator, it is finding after an arson occurred that a relatively worthless building had enormous insurance coverage on it. The immediate assumption is that the insurance agent or broker who placed that insurance is in "cahoots" with the owner in a fraud scheme. A number of explanations can be offered for the apparent overwriting of insurance, which may or may not indicate a corrupt motive on the part of an individual agent or broker. Generally, insurance companies in most states sell fire and casualty insurance on the replacement value of the building and contents, in order to offset the owner's potential loss due to depreciation and inflated (but legal) current costs of rebuilding and refurbishing. Since a company normally charges more for replacement value insurance in its premiums, the agent or broker's share of that higher premium is likewise increased. Hence, this is an incentive—and a legal one—which can explain peculiarly high insurance coverage.

The investigator should also be aware of a possible fraud indicator: a property which has been insured for even more than replacement cost because important information on its fair market value and the physical risk (i.e., building age or status of safety systems) have been falsified or omitted, or an unjustifiably positive underwriting report has been submitted to the insurance company. Because many states provide for coverage on the basis of an insurance "binder," rather than a normal written contract which follows, an agent (but not a broker) may bind a policy orally before an underwriting decision has been made. If the arson occurs after the binder, but before the written policy is issued by the company, in most cases the insured is eligible for payment. In a number of states, agents and brokers are prohibited by either state law or insurance regulations from issuing binders on premises which they have not physically inspected, or at least personally seen and visited. While this provision, if enforced, stands to benefit insurance companies in preventing internal security breaches, it has wider application to the law enforcement community concerned with arson-fraud. In certain cases where the same agents appear as having placed insurance for premises later torched, arson unit personnel may be able to provide information to that state's insurance commissioner on the agent who issues binders without even checking on the existence of the buildings. That agent's license may be revoked or suspended, and the investigative unit realizes that it has access to an arson prevention weapon with some teeth.

In certain cases, insurance agents and brokers have become involved in arson-fraud schemes because of their knowledge of a certain company's willingness to write policies in a particular area of town, or within certain dollar limits, without close regard to underwriting considerations. Such an agent often works independently rather than for an insurance company, and he carefully rotates placement of the policies around a circuit of insurance companies so that no one spots a red flag of multiple arsons over a short period of time. Investigators who are concerned about an agent or broker who repeatedly writes insurance on properties which later burn can check the national Property Insurance Loss Register (PILR) and the Insurance Crime Prevention Institute (ICPI), both of which are described fully in Chapter 8.

G. Loan Officials

Loan officers in lending institutions have surfaced, on a few occasions, as participants in arson-fraud schemes. There
seem to be two types of situations in which they become involved. First, the loan officer receives a commercial bribe from a prospective mortgagor who is looking for a loan but who may be an inordinately high risk. The officer, in effect, is paid to disregard the borrower's risk and help arrange the loan anyway. For this service, the officer usually receives a small bribe, the size of which depends upon the nature of the borrower's objective risk, the wants and greed of the loan officer, and related circumstances which vary from case to case.

In the second type of situation, an official of a lending institution (usually in a higher management position than a loan officer), enters into an arrangement with an arson-fraud schemer (usually a real estate speculator) wherein the mortgagor agrees to take a number of mortgages at or near the point of default over from the institution. The institution's officer usually knows that the mortgagor with whom he is dealing will soon experience "casualties" in those premises. When the insurance companies settle on the policies, the institution receives the face amount of the mortgages. In this type of scheme, the speculator-mortgagor makes money by inflating the insurance coverage far beyond the face value of the mortgage, and thus he makes a hefty profit even after the mortgage is fully satisfied. The lending institution benefits from this corrupt scheme because properties that might otherwise be in default, and consequently hard to sell at auction, become the vehicles for effecting an insurance settlement which wipes a number of the risky mortgages from the institution's books. While this type of scheme is not encountered often by investigators, it has occurred in certain thrift institutions which (a) are not federally chartered; (b) write mortgages primarily in declining, inner-city areas; (c) exhibit other signs of unhealthy lending practices, such as many "insider" loans; and (d) have been the subjects of criticism for improper practices by state or federal regulatory agencies following bank examinations.

H. Realtors, Real Estate Speculators, and Straws

A corrupt realtor is in a position to become involved in an arson-for-profit scheme because he knows, on the one hand, how to obtain information on rapid changes in real estate value in various neighborhoods. On the other hand, he knows how to locate specialists in insurance, real estate law (especially conveyancing), and contracting, who together or individually can function as the core of an arson-fraud conspiracy. Much of the real estate arson-for-profit has occurred in somewhat deteriorating multi-family housing. In many cases the arsons stem from realtors or speculators who buy up the properties with the express intention of arranging an arson-fraud soon thereafter.

Realtors are also familiar with the purchase of property through a "straw" owner. The straw often serves as a legal surrogate for the real owner, who wants to remain anonymous. (See the Appendix on "Straws" to the Tactical Guide by Mark Zanger, in Part II of this Manual.) A realtor can also arrange the subsequent sale to another party soon thereafter for the purpose of making the property seem to be worth more because of its paper value. That value is then used to determine the amount of insurance the new "owner" will try to obtain--usually with success. In a word, a realtor can obtain and communicate vast quantities of information about property values and the details of transactions, and thus is in a good position to be able to sense the limits of arson and insurance fraud activity that insurance, lending, and law enforcement institutions will tolerate before they intervene or ask serious questions. Because of this self-taught understanding of regulatory and enforcement toleration limits, realtors are extremely important and knowledgeable participants when they become involved in arson-fraud schemes.

I. Contractors

Contractors are frequently mentioned as a category of specialists who know a great deal about neighborhoods and
building design. Where a contractor of one type or another becomes involved in an arson-fraud scheme, it is often because he knows some aspect of housing or housing loan practices to such a degree that he feels qualified to perpetrate a fraud without being caught. For example, building contractors who specialize in housing rehabilitation are familiar with building construction and electrical systems, as well as with the application and payment procedures concerning government benefit programs. Thus, this contractor is familiar with both the actual torching and financial fraud aspects of arson.

A number of specialized types of contractors on occasion have become involved in arson-fraud schemes, mainly because the nature of their work brings them into contact with other schemers with whom they agree to work cooperatively. Types of contractors who are likely to have this kind of knowledge include electrical, board-up, glass, remodeling, and plumbing and heating contractors. Investigators interested in determining whether there might be contractor involvement in an arson-fraud scheme, or pattern of schemes, should review records of government loans and loan insurance, insurance claims filed by the contractors, and related information to see if certain contractors appear more often than might be expected in building fires—especially those undergoing conversion, redevelopment, or rehabilitation.

III. The Special Problem of Receivers of Stolen Goods (Fences)

Criminal receivers of stolen goods (fences) are offenders with their feet in two worlds. Generally businessmen, they are likely to have extensive contacts within the business community. With substantial incomes derived from both legitimate and illegitimate business interests, they can move easily in political and economic arenas. At the same time, however, fences are directly and continually involved in the world of theft. This involvement puts them in frequent contact with a range of offenders, from petty criminals to professional (i.e., career) thieves.

The two worlds straddled by fences not only give them extensive influence, but also provide them with unique opportunities to become aware of and involved in arson-for-profit schemes. Agencies which have investigated and prosecuted fences for arson-related activities generally describe three levels of involvement by such persons: (1) as fire brokers; (2) as key informants or information sources; and (3) as outlets for property taken from the premises before a fire. Each of these roles played by fences in economic arson will be discussed in turn, followed by a section summarizing how and why a fencing approach may provide fruitful avenues for arson investigators to pursue.

A. The Fence as a Fire Broker

There appear to be two types of situations in which fences act as fire brokers. In the first, the fence is the dominant and central force in an arson-for-profit ring. Here the fence, because he himself is a businessman, is aware of a troubled business or real estate condition. He recruits a torch and aggressively seeks out clients to use his services. In one such ring, a fence who was an antique dealer contracted out the services of torches he employed to a group of realtors and to the owners of multi-family residential structures. As part of the services provided these clients, the fence also counseled them on increasing their insurance coverage and offered advice on dealing with banks and insurance companies. Thus, the fence not only provided the means to execute the fires (the torch), he also was instrumental in orchestrating the financial arrangements concerning the properties scheduled for burning so as to maximize the overall profit. For his services, the fence received a percentage of the insurance settlement from each of the fires.

The second type of situation in which fences act as fire brokers is in setting up individual fires on a contract basis. Here the fence is contacted by a business acquaintance or a "friend" of such an acquaintance and asked to arrange a fire.
The fence then recruits a torch, generally a petty thief with whom he has previously done business, to arrange for the fire. In this instance, the fence is playing a role not unlike the one he commonly plays in theft, where he sets up a theft-to-order. Only in this case, the fence is arranging an arson-to-order and receiving a share of the profits for his trouble. While the fence in this situation is not in the "fire business" as such (i.e., he is not aggressively marketing the services of a particular torch or his own services as a fire broker), he is both willing and able to execute a profitable arson for clients who contact him. However, there is evidence to suggest that fences who engineer arsons-to-order have considerable knowledge of insurance industry practices and provide clients with technical information about increasing insurance coverage and about selecting insurers who are not known for their diligence in investigating insurance claims. There is also evidence to suggest that fences whose advice is sought regarding a failing business may advocate the arson option as a logical and profitable alternative or prelude to bankruptcy.

Interestingly enough, despite the fence's primary criminal interest in stolen property, goods (i.e., inventory, fixtures, etc.) are not likely to be removed from premises that a fence has scheduled for burning. On the contrary, investigators have noted that when a petty thief is recruited for arson by a fence, the thief is directly and particularly instructed not to remove goods prior to the fire. Apparently fences in these cases do not want to establish an evidentiary trail leading to them by receiving goods that have been in a building that burned. The fences seem to understand that any property taken from the premises can provide a valuable investigative lead, and they prefer not to generate such evidence. Thus, they forego additional profits that such goods might afford them in exchange for the monies they stand to receive for having engineered or set up the arson. In this way, too, their involvement in the arson scheme will remain masked and difficult to uncover.

B. The Fence as the Key Information Source

Fences have also been known to play a more passive role in economic arson by serving as key information sources for those seeking arson, as a way to make money or to extricate themselves from financial difficulties. As one arson unit commander put it: "It's like murder-for-hire. If you were a fairly respectable type of person and needed that kind of help, who would you ask?" For many people on the margins of the business and white-collar crime worlds, the answer is often the fence, a "high roller" who moves easily in those two circles. In this type of situation, the fence does not become directly involved in the arson. Instead he merely puts those who contact him in touch with others who can help them arrange an arson. In other words, this type of fence is acting as a pigeon. The fence often receives payment similar to a finder's fee for performing this information function, or he may just serve in this capacity as a favor, to be collected on later for other purposes. Although the fence plays only a secondary role in economic arson in such instances, this level of fence-involvement clearly illustrates the significance of fences in serving as bridges, or middlemen, between "respectable" business or property owners and torches. Without such bridges, arson would not be as viable an option as it seems to be in many jurisdictions.

C. The Fence as an Outlet for Property

The last level of involvement of fences in arson-for-profit reported by investigators consists of the fence playing the traditional and familiar role of outlet for illicitly obtained goods. In this type of situation, the fence has nothing to do with the arson, but he becomes privy to it through receipt of goods removed from the premises prior to the fire. Generally, the fence's knowledge is after the fact rather than prior to the arson. This is because in most cases of this type, a
thief-torch is removing goods from a premise on his own authority and for his own benefit rather than doing so at the direction of others. Thus, it occurs to many petty thieves who are recruited for arson to make some extra money on the deal by stealing property before the fire and selling it to a fence. Fences who serve as outlets for such thieves can thereby gain information about arson fires and thieves willing to commit arson.

In a limited number of circumstances, fences may have prior knowledge of arsons through agreements to receive goods from owners of businesses or residences who are planning fires. Here the property owner has decided to increase his profits from a fire by getting money from the fence for the removed goods, as well as from the insurer. Most investigators feel, however, that this latter situation does not occur very often. Instead, fences are more likely to serve as outlets after the fact for the thief-torch.

D. The Fencing Angle in Arson Investigation

Investigators in those jurisdictions where fences have been active in economic arson feel strongly about the potential of pursuing this avenue in an arson investigation. At minimum, they contend that the fence is likely to have considerable knowledge both about torches active in a particular area and about owners seeking to burn business or residential properties. As such, the fence is an often overlooked source of intelligence information. Just how willing an informant the fence may be, however, will depend upon his level of involvement in arson-related activities. Fences serving as fire brokers or as pigeons for those contemplating arson are highly unlikely informants for the investigator. In these situations, the fence will more likely be the subject of investigation, revealed under questioning by the thief-torch or the client of the arsonist. Where the fence is merely serving as an outlet for goods, however, he may be persuaded to provide valuable information to the investigator. This is particularly the case: (1) where a fire has resulted in a loss of life, since fences are generally not interested in becoming involved in a homicide investigation; or (2) where a petty thief has set the fire, since fences are generally not reluctant to give up thieves to protect themselves.

In addition to the need to recognize the possible involvement of fences in economic arson and the potential of gaining information from them, two further aspects of the fencing angle should be of concern to the arson investigator. First, it is clear that fences, whether or not they become involved in arson-for-profit, have a sensitivity to the business and economic conditions in a community. This sensitivity permits them to assemble readily a group of clients should they decide to become fire brokers, or to be prepared should they be called upon to put business acquaintances in touch with a torch.

Arson investigators would do well to develop a similar sensitivity to local economic conditions. One arson unit has attempted to develop such an awareness by, for example, comparing liquor orders placed by local bars and nightclubs this year as opposed to last year, and putting such information in its arson early warning system. Fences who sell to other businesses may know that a failure is imminent by a reduction in orders. Investigators can gain similar information by selective probes and data gathering in the economic sector.

Finally, arson investigators may do well to emulate the fence's concern about the evidentiary value of goods taken from the scene of an arson. Despite the fence's orders, many petty thieves who serve as arsonists may find the presence of valuable goods just too tempting to pass up and may seek to make extra money by peddling such goods. Careful attention at the fire scene to the possibility of missing contents may reveal a situation where the thief just couldn't resist the temptation, thereby providing the investigator with a valuable avenue of investigation that may not only identify the...
CHAPTER 4: SELECTING AND PLANNING ENFORCEMENT STRATEGIES

Introduction

No one can prescribe one overall strategic approach that will work for an investigator in every type of arson-fraud case. The reason is simple enough; strategies need to be determined by the mix of arson-for-profit motives and the levels of organization of arson-fraud in that jurisdiction. These arsons may be all owner-initiated, or possibly (though very unlikely) all speculator-initiated. The reality in most communities is a mixture which falls somewhere between these two extremes. Therefore, an overall enforcement strategy should be based to a large extent on learning the type and number of criminal and business specialists who are probably active in arson-fraud in any community. The section below is devoted to a discussion of methods to develop profiles of such operators and to combine them with strategic and tactical intelligence on economic arson.

I. Developing an Intelligence Program

Many different types of criminals with a variety of specialized skills commit arson-for-profit, and they do this for an often confusing array of specific economic motives. Therefore, the requirements of an adequate intelligence program to combat arson-fraud are more demanding than for other forms of crime control. From the experiences of several agencies which have mounted special arson-for-profit intelligence efforts, it is possible to suggest at least two manageable approaches to the intelligence function in this area. These involve a review of information on: (1) local economic trends that create market conditions conducive to patterns of arson-fraud, and (2) likely criminal and business specialists who can organize and service that potential market.

A. Intelligence on Local Economic Trends

The first question to ask in developing any criminal intelligence program is when and where will crimes occur, and
armed with that information, what can be done about it? A program of economic intelligence should be designed to explain why patterns of geographic arson fires or fires in particular types of businesses or housing occur. An important question to ask is what economic forces are operating in that industrial, commercial, or housing sector that might cause enough financial stress to make arson-fraud an attractive option. Answers along the general lines of "recession" or "product obsolescence" become helpful when additional factors such as tight money and credit restrictions can be identified as coming into play. Economic factors other than financial stress might include the onset of investment opportunities, whereby a vacant lot might be worth more than the property with the original building on it (e.g., for redevelopment). Another example would be a trend in a community with rent control toward converting older apartments into refurbished, more fashionable condominiums. There the arsons may serve the illicit function of "instant evictions."

To develop an economic intelligence program on arson-for-profit, the investigator can take several steps:

- First, review the Tactical Guide on Economic Intelligence by Mark Zanger in Part II, and the Chapter on "Locating Sources of Information and Expertise," in Part I of this Manual.

- Second, talk with known, trustworthy experts in your community about economic trends likely to affect arson-fraud. Such experts include instructors on real estate and urban planning at local colleges, attorneys who specialize in real estate conveyancing, and city and redevelopment authority planners.

- Third, go to the most central source you can find on local business trends and overt indicators of such trends. These might include the research arm of the local Chamber of Commerce, Federal Reserve Bank, or the nearest Federal Bankruptcy Court, where a simple review of the recent docket can provide information on types and sizes of businesses which have been going bankrupt.

- Fourth, establish a file of all information from the business and financial sections of your local newspapers, as well as specialized commercial and trade newspapers published in your area.

- Fifth, where a major industry is either headquartered or has a major manufacturing plant in your community, try to locate a specialized trade journal on the subject of that industry to obtain the benefit of information on economic conditions which affect that industry.

The investigator who makes a first attempt at developing the above type of economic intelligence may find it somewhat frustrating. That is probably because of the overly general quality of the information he has obtained, and consequently, its limited ability to help explain or even point toward specific patterns of future arson activity. The real task of building solid economic intelligence is, however, no different from gathering any other kind of intelligence: the investigator must gradually improve his sources, check and recheck their reliability, and strive to obtain even more specific information to make more reliable predictions. In the case of economic intelligence, this can mean locating the most knowledgeable expert or the best available trade periodical on a particular subject.

B. Intelligence on Arson-Fraud Specialists

In the early stages of arson-fraud activity, the identities of specialists who will likely join together at a later date are rarely known to police or fire investigators. The possible exception is the torch. Pigeons, fire brokers, coaches and advisors--as well as the corrupt public adjuster, realtor, or insurance agent--are rarely the routine subjects of law enforcement attention when patterns of arson-fraud are absent or just beginning. Therefore, intelligence on the identities and any specifics on the operations of these specialists is likely to be sparse and scattered around the various fire, police, and other agencies that might have some interest in that particular specialist. Therefore, the second task of the
investigator in building an intelligence program on arson-for-profit is to identify the roles of criminal and business specialists engaged in arson-fraud in that community, and then proceed to determine their identities.

The procedure for developing a pool of such intelligence information is a simple, logical one and involves the following steps:

- First, examine each of the criminal areas where we know arson-fraud schemers get their start: (a) street crime and professional crime (torches and fences); (b) white-collar crime (fire brokers, coaches and advisors, and each of the corrupt business specialists); and (c) organized crime (pigeons and syndicate figures, and certain fences).

- Second, develop information on whether specialists in each of those areas of criminal activity (i.e., street, professional, white-collar, and organized crime) have begun to handle or inquire about prospective clients interested in arson-for-profit. For example, what intelligence is there on loan sharks who work with pigeons to steer the borrowers to an arsonist?

- Third, what criminal activity at the fringe of legitimate business activity might indicate a jump to arson-fraud? For example, tight money (high interest) situations help bring about advanced fee schemes, many of which are fraudulent. Are the schemers operating also as pigeons or fire brokers to direct a would-be borrower to someone to help set up an arson?

- Fourth, certain types of businesses in the community are always experiencing their own special economic problems, and a steady increase in arsons may be an indication of this. What types of criminal specialists would be most likely to identify that city-wide (or regional) situation as a potential market for arson-fraud, and what initial probes or "marketing expeditions" might these specialists have begun in order to shape and organize that market? (Remember, there is always an answer to this question, and its relative difficulty is only a measure of how much effort will be required to develop a solid, comprehensive criminal intelligence program.)

The final step in identifying the roles of the various specialists is to begin to identify the specialists themselves--how many potential and currently active pigeons, fire brokers, fences active in arson, etc., are there? It is important that the investigator begin with the more general question of the roles or functions which the arson-specialists might fill, and then proceed to personal identifications, rather than press too quickly at the outset to identify the major torches or corrupt public adjusters. The goal in developing a comprehensive intelligence program on economic trends and likely specialists is to develop a collection and analysis effort that strives to identify all possible participants, not to confirm the identities of those who may be known or suspected at the outset. Because so many types of criminals progress to arson-fraud and later move on to other schemes, it is important to take a dynamic, rather than static, approach toward this area of intelligence. Otherwise, the investigator may succeed only in identifying a few of the more traditional and well known schemers (such as a torch or a corrupt public adjuster). Because that kind of intelligence effort can be too limited, scores of other specialists might escape detection for a dangerously long period of time.

II. Establishing Flexible Enforcement Options

One major purpose of this enforcement manual is to stress the existence and application of alternatives to the familiar focus on the crime of arson in arson-for-profit. Therefore, rather than dwell on the development of an arson charge per se, the focus here is placed instead on white-collar and anti-racketeering approaches which have been shown to be effective in building arson-for-profit cases.

Many training programs and enforcement manuals try to discipline the investigator to build his case around one or two specific criminal statutes. While that approach may work well with crimes such as burglary or gambling, it is more difficult to apply that concept to a hybrid form of crime, such as arson-fraud racketeering, where career criminals and seemingly
legitimate businessmen work hand-in-hand to commit arson and a variety of financial crimes. Therefore, the approach which is recommended here is a strategic one designed to open—and keep open—as many avenues of investigation as possible so that the most productive option can be identified and followed. From that logical process, the range of charging options will remain wide, and the best one will become clearer as each specialist in the arson-fraud case is identified, and his conspiratorial or ancillary crimes help the investigator focus on the most effective charging options.

A. The White-Collar Crime Approach

Fire and arson investigators spend a great deal of time learning about what constitutes the corpus delicti in the crime of arson. Where arson is committed as the intermediate step necessary to effect an insurance fraud, the investigator should note the existence of a second corpus, that of the fraud crime. This means developing a realization that papers in the insurance claim file contain probable evidence of crimes. The white-collar crimes committed as part of the arson scheme usually entail fraud committed against the insurer. The policyholder swears falsely that the origin of the fire was either accidental or unknown to him, and many policyholders in arson-fraud schemes also falsely represent the existence and/or the value of property destroyed in the fire. In many states the crimes of larceny, cheating by false pretenses, or obtaining money by false pretenses cover these offenses. In those types of cases, the policyholder obtains money from the insurer under the artifice that the fire was either accidental or not caused by him, when in fact the opposite was true, or because he claimed that material was destroyed which in fact was not, or that it was valued at more than he knew it was worth.

In the white-collar crime approach to arson-fraud, it is important to recognize that the policyholder may have acted in league with others to falsify a variety of loan applications, business records, and formal documents in order to create and continue the fraud artifice. In addition to the fraudulent proof-of-loss form, this potential documentary evidence includes:

- **Business ledgers**, purporting to show a higher volume of business than that actually done, to inflate the amount of business interruption insurance settlement.
- **Mortgage and other loan applications**, where the applicant falsified the statement of his assets, employment, or business condition in order to give himself the appearance of being a more attractive risk.
- **Insurance application forms**, which may contain false information on personal history, prior fires, or other items so that the insurance applicant falsely tries to appear as a good, rather than bad, insurance risk. Also included are applications to change the amounts of coverage by increasing it—sometimes just before the fire.
- **Inventory records**, which may have been padded with false amounts in order to increase the fire and business interruption insurance claims, and also to substantiate those claims.
- **Tax returns**, for the obvious motive of reducing the owner's revenue liability to state and federal authorities.
- **Tax abatement application**, may show true gross income from a business, or even a fraudulently deflated amount.

When considering the white-collar crime approach to arson-for-profit, it is extremely important to develop a frame of mind about the "paper trail" which the insured or his co-conspirators generated, and which will remain as an archival record of the crime long after the other forensic evidence of the arson at the fire scene has been compromised or washed away. Moreover, much of the evidence of the fraud corpus may be conveniently collected in the repository of the claim file of the insurance company which provided coverage for the owner-insured.
An investigator or an entire unit which decides to take a
white-collar crime approach to arson-fraud should provide
answers to some very basic immediate questions:
• Where and how will we obtain the financial and other
expertise we need to do an effective job on a
fraud-oriented investigation?
• How do we meet the requirements of conducting a large
scale, multi-suspect investigation, assuming that
beside the owner and torch there may often be several
white-collar crime specialists in these schemes?
• Who should be our primary, secondary, etc., targets in
each investigation, and how do we go about building a
case against each target?

Answers to these and other related questions do not come
easily, but they do follow systematically if the investigator,
or other specialized personnel in his unit, takes a logical
approach in moving from concepts and strategies toward
operational tactics in investigation.

B. An Anti-Racketeering Approach

The white-collar crime approach discussed above entails a
commitment to pursue the paper trail left by the arson-fraud
participants. A fraud case may involve only an owner, an owner
and a torch, or a more complex owner-torch-fire broker-public
adjuster combination. While the white-collar crime approach
can be used against a scheme with one or more specialists,
members of an arson conspiracy who are engaged in multiple
acts of arson and fraud can be attacked from another direction. The
systematic pattern of arson activity qualifies (as organized
crime) under many experts’ literal definition of that term,
although a syndicate crime figure may not be involved in the
multiple arson-frauds caused by a group of schemers.

The principal anti-racketeering approach involves use of the
federal Racketeer Influenced and Corrupt Organizations
(RICO) law, 18 U.S.C. §§ 1961-1968, or similar laws modeled
after RICO and passed in several states (especially Florida,

Under RICO, it must be proven in the case of an arson-fraud
that a group of individuals banded together and were associated
in fact for the purpose of creating an illicit enterprise (a de
facto illicit business) to carry out certain specified types of
racketeering activity, and that they did so by committing a
pattern (i.e., two or more) of such racketeering acts within
roughly a ten-year span (so long as one of the acts occurred
within the normal statute of limitations). Further, this
pattern of racketeering activity must have affected interstate
commerce in some way.

An arson-fraud or arson-extortion scheme may qualify as a
de facto illicit business enterprise under RICO. Arson-fraud
cases prosecuted under the federal RICO law include those where
the defendants committed multiple acts of arson under state law
(an economic motive for arson is not required under RICO) or
violated federal mail fraud laws by mailing false
proofs-of-loss and other insurance documentation, or by causing
to be mailed such materials. Most of the prosecuted federal
RICO cases involved active participation by local arson and/or
police investigators, who worked with the FBI, the Bureau of
Alcohol, Tobacco, and Firearms, and/or U.S. Postal Inspectors
on the particular case.

In addition to substantial 20-year maximum sentences and
$25,000 fines for both RICO and RICO conspiracy offenses, a
number of additional anti-racketeering remedies that are part
of the RICO law should be considered:
• A criminal forfeiture provision covers businesses and
assets which were used in or resulted from the
racketeering activity. A federal judge can order the
divestiture of a business or its ill-gotten assets
involved in the racketeering. In arson-for-profit
cases, these might include real estate agencies,
insurance brokerages, and other businesses of the
convicted participants. [18 U.S.C. § 1963(c)]
• A treble damage civil remedy provision, whereby a
victim of a pattern of racketeering activity, such as
an insurance company, can sue for three times the cost
of the damages, plus a reasonable attorney’s fee. [18
U.S.C. § 1964(c)]
In order to avoid the dissipation or hidden channelling of the racketeering assets, a provision in the RICO law allows a judge to freeze the assets in question and appoint someone to oversee their preservation, and possible later distribution to victims. [18 U.S.C. § 1964(a)]

While development of a federal RICO case entails cooperation with federal agencies and the probable filing of federal charges, the advantages to a local investigator of joint participation are substantial. First, the combined federal and non-federal resources, coupled with the substantial teeth of the RICO law, help assure that all members of the arson-fraud conspiracy will be prosecuted, convicted, and removed for good from this sordid activity. Second, a number of federal provisions for protecting and relocating government witnesses are available. These funds usually are not available to state and local agencies. Third, the availability of federal attorneys, specially assigned to organized crime strike forces, carries with it the access to a variety of investigative tools such as investigative grand juries and the powers of immunity and contempt which have frequently been used to break other types of large scale criminal conspiracies. Fourth, evidence such as results of consensual monitoring will be admissible in federal and not in state court.

The usefulness of the federal RICO law to combat fraud and extortion motives behind arson racketeering can be seen from the growing list of successful prosecutions. These include U.S. v. Hansen, 583 F.2d 325 (1978); U.S. v. Capito (C.D. Cal., 1975); U.S. v. Carter (M.D. Fla., 1977); U.S. v. Kern (D. N.J., 1978); U.S. v. Weisberg (N.D. Ohio, 1977); U.S. v. Thevis (N.D. Ga., 1975); and U.S. v. Carbone (W.D. Wash., 1978). Several law review articles discuss the criminal and civil applications of RICO, especially to racketeering enterprises such as professional arson rings. RICO is considered in detail, including its application criminally and civilly to arson, in Materials on RICO: Criminal Overview.
owners, realtors, insurance agents, and others active in, or actively contemplating, arson-fraud. Only against this informational backdrop can a coherent and strategically sound undercover operation be planned. Once an adequate information base is established, it is necessary to determine the feasible level of penetration the operation can make in the arson-fraud scheme. Because the level of penetration into an arson-fraud conspiracy is often a function of time and money, the question of available resources becomes quite important. But other issues are equally significant; in particular, the degree to which undercover officers or informants can continue to operate safely and without committing egregious criminal acts while still building solid, prosecutable cases.

There are two levels of penetration in arson-fraud schemes that can be effected through use of undercover strategies. The first level involves the use of an undercover officer posing as a torch. In this situation, informants are used to "establish" the identity of the undercover officer as an arsonist. The officer (who is fitted with an electronic transmitter) begins to circulate where those businessmen and others interested in fraudulent arsons are known to frequent. The officer then waits to be contacted by those expressing an interest in arson, allowing the subjects of the investigation to make the first overtures and to suggest the arson. The officer's communications should remain circumspect while he attempts to draw out the subjects to describe their criminal intent and purposes. Once ample evidence is obtained, arrests for conspiracy or the attempt to commit arson can occur.

A second and more extensive level of penetration in arson-fraud involves use of an undercover operation following a successful arson-for-profit investigation. One common practice is for persons involved in the real estate and insurance businesses to purchase properties, and remodel or alter the structures, substantially inflating the reported costs for such alterations. Often contractors become involved at this point by submitting phony invoices in furtherance of the scheme. Next, insurance is acquired reflecting the inflated costs of remodeling, and several months later the building is burned and an insurance claim is made for the inflated value of the property.

Following the successful investigation of such a case, one of two situations may occur. In the first, indictments of the participants may be obtained and sealed. In the second, the substantial information obtained, while not sufficient for indictment, may be strong enough to convince one of the participants that future prosecution is likely. It is at this point, in either case, that the undercover operation begins. The first step is to choose one of the participants (those in the real estate or insurance business seem to be the most likely candidates) to explain to him his pending or possible indictment and to offer him the prospect of later intercession for leniency when the original case is tried, in exchange for cooperation with the investigators. Note that the individual here is not usually promised immunity from prosecution; rather, he is assured that information regarding his assistance to and cooperation with law enforcement will be provided to the prosecutor or judge later. Once the individual agrees to cooperate, he is wired with a transmitter, and he is released to carry on as he previously did. Generally, the participant enlisted to cooperate with the investigation is not one of the central figures in the arson scheme. The cooperating individual may also introduce an undercover officer into the conspiratorial inner circle to aid in the gathering of useful evidence.

It is particularly important to provide the subjects of the investigation with opportunities to admit to and/or to commit criminal acts, short of the arson. These acts can also be totally unrelated to the arson. For example, they may involve discussions of prior stolen property or gambling transactions, or the presentation of opportunities to engage in such
activities. The point of this is to establish that the subjects are predisposed to commit many types of criminal acts on a broad scale. The logic is that one who has been shown to have a criminal predisposition cannot persuasively raise the entrapment defense for the arson-related activities he is later charged with. The operation, using the cooperating individual and any undercover officers who may have been introduced into the situation, proceeds until enough evidence is obtained for an indictment. In the example given, this would ordinarily occur after a building has been purchased, remodeled, insured, and scheduled for burning, but before the occurrence of the arson.

Such an operation could be long and costly, but it may provide the best evidence of an arson conspiracy and how it proceeds, consequently offering the chance to build a solid case against the widest range of co-conspirators. Given an appropriate level of resources and the seriousness of arson-fraud in many jurisdictions, the undercover operation remains a strategy that should be considered by investigators.

In planning the undercover investigation, strenuous efforts should be made to avoid any possible entrapment or other police misconduct problem. Investigators should work closely with prosecutors on preparation of procedures to address these issues. In particular, recent court cases regarding entrapment and misconduct of undercover officers should be reviewed. See especially U.S. v. Tison 588 F.2d 373 (1978) and Hampton v. U.S. 425 U.S. 484 (1976). A review of recent developments in entrapment law can be found in the Case Comment, "Due Process Defense When Government Agents Instigate and Abet Crime," 67 Georgetown Law Journal 6 (1979).

2. Electronic Surveillance. Investigators may find it essential to employ techniques designed to capture incriminating conversations regarding arson-fraud schemes which would not be accessible in any other way. Frequently, experienced criminals—white-collar, organized, and professional—may insulate themselves so completely from any associate who is not fully trusted that they do not discuss actions that are part of the conspiracy with them. Thus, many potential or actual informants have great difficulty obtaining specific information. Another problem with developing informants or witnesses is that subordinates in organized crime groups or white-collar crime operations may be reluctant to testify later against a principal. Therefore, the investigators may have very limited options in trying to develop that portion of the fraud or racketeering case against the central conspirators. Court-authorized wiretapping is an approach that should be considered in this situation—legislation permitting. The prospect should be weighed in combination with the substantial time and manpower demands involved, as well as the stringent legal and constitutional requirements.

A decision on whether or not to seek a court order to install a wiretap of a telephone used in criminal activity normally is made on the basis of the failure of conventional investigative means to obtain the needed evidence. Where the investigator encounters such difficulties, for reasons cited above, the wiretap can be expected to provide evidence against a wide range of criminal activities in addition to arson and insurance fraud. Conversely, investigators who contemplate seeking a court order for a tap on the phone of an organized crime figure or other central conspirator for another type of violation should consider the arson-related background information that may be able to contribute to an affidavit to establish probable cause for the wiretap application.

Experience with the use of wiretapes in conspiracy cases where arson and fraud have figured demonstrates that the eventual evidence so obtained can be expected to: (1) expand greatly the number of eventual defendants, (2) increase the variety of charges for non-arson related crimes, and consequently, (3) increase the number of defendants who decide to plead guilty in the face of the often weighty evidence against them.
In situations where the investigator feels it essential to monitor conspiratorial conversations at a location where such communications do not occur over the telephone, it may be advisable to consider the installation of an electronic listening device. Candidate locations include headquarters or legitimate business office "fronts" of organized crime figures, fences, and major white-collar criminals who transact considerable amounts of their illicit business in such locations. Before considering the installation of any electronic device, legal counsel advising the law enforcement agency should carefully review recent court decisions on this issue; especially U.S. v. Finazzo 583 F.2d 937 (1978) and Dalia v. U.S. 441 U.S. 238 (1979). A law review article which provides a comprehensive analysis of recent litigation on electronic surveillance is "United States v. Finazzo: Sixth Circuit Position on Break-Ins to Install 'Bugs' Rejected by Supreme Court in Dalia," 10 University of Toledo Law Review 3 (1979).

3. The Grand Jury as an Investigative Tool. It is virtually impossible to read any manual on organized crime enforcement or attend any training program in this field without being saturated with testimonials on the value of the grand jury as an investigative tool. However, investigators in arson-for-profit enforcement seem to take longer to be persuaded that any case involving an element of conspiracy can benefit from use of the grand jury. In order to take this approach, there is a prerequisite that a prosecutor develop an early and active interest in an investigation in order to make the shift properly from the field to grand jury phases of investigation. Because investigators may be reluctant to approach a prosecutor about a suspected fraud scheme until they feel comfortable they have a prima facie case, the full elements of a fraud case may remain unknown for want of evidence. It can be difficult for a prosecutor to know whether a grand jury investigation may be useful unless he is apprised early on of his, and its, potential contribution. Thus, closer investigator-prosecutor coordination of an investigation can pave the way for more productive use of the grand jury.

The value of the investigating grand jury lies in its powers (such as witness immunity) to develop co-conspirators as witnesses or to determine early if their false statements might serve as the basis for a perjury charge. The rapid movement of an investigation from the field to the grand jury can also signal to arson-fraud co-conspirators, as well as others contemplating such activity, that the whole story of their activities and involvements is being told. If used properly--that is, only where field investigation has produced material for batteries of relevant questions--the grand jury can assist in exposing all the ramifications of arson-fraud activity. This exposure itself can be an extremely powerful deterrent to future arson-fraud activity, apart from any eventual indictments and convictions.

D. Strategies for Overcoming Investigative Obstacles. Investigators new to arson-fraud investigation can run into an unforeseen obstacle which at first seems more formidable than it really is. A common problem is the inability to determine who owns a burned building. Then and there the investigator tries to solve the problem with little training or prior experience. The ad hoc solutions which often emerge do not work, and the investigation may languish because of an unnecessarily rigid reaction to an obstacle.

The list of commonly encountered problems is not long. In each case, there are steps which the investigator can take in order to overcome the obstacle. The outline below is intended as a checklist of things to do and places to go for assistance when a problem is encountered.

3. Inability to identify the real owner. This normally occurs when a straw is suspected of standing in for the owner, or where a corporation or land trust is used instead. In this situation the investigator should consider the following:
Review "Outline of Methods to Determine Hidden Ownership" by Richard Jaffee, in Part II of this Manual.

Try to obtain identity of the payer of utility bills from the electric, gas, or telephone companies.
Review feasibility of obtaining subpoenas for checking account records of the straw or corporation in order to identify endorsers or co-signatory.

Interview tenants, neighbors, and custodial or other employees, who often are told routinely the identity of the party who is, claims to be, or is reputed to be, the owner.

Inability to determine insurer. This occurs where the owner or occupant refuses to cooperate with the investigator.

Examine the record of the mortgage at the town or county repository of such records to determine the mortgagee. Review the Tactical Guide by Harvey Schmidt in Part II of this Manual for methods to conduct such searches. Contact the mortgagee, who usually requires proof of fire insurance before granting the mortgage. It may be that the insured still has that original policy in force.

In a state with a FAIR Plan, contact that agency, especially if the property is in a high risk neighborhood.

Contact the Property Insurance Loss Register (PILR) or the Insurance Crime Prevention Institute (ICPI), both of which are profiled later in Part I of this Manual.

Fire cause and origin were done poorly; scene has since been contaminated. This normally occurs when the investigator later learns of a suspicious fire where he has some reason to believe the owner had a fraud motive. However, the initial cause and origin determination was inadequate, and the scene is now too compromised to permit a second attempt.

Business books and records destroyed in the fire. Since this can occur for a variety of reasons--including an accidental fire--it is especially important that the investigator pin down a reasonable explanation for the destruction of the books. Motives ranging from a cover-up of embezzlement to a combined bankruptcy fraud-arson could be behind the fire.

Since the owner will have to submit some form of documentation on business volume to support his insurance claim, obtain a set of those records at the appropriate time.

Ascertain whether the firm's accountant had duplicate sets of financial records, kept elsewhere, that survived the fire.

Obtain copies of recent personal and business state income or sales tax returns, to perform an analysis on the business's possible financial problems over an extended period of time.

If the owner has provided copies of federal income and/or corporate tax returns as part of the insurance claims records, such records might be available to the investigator's agency through subpoena or other compulsory means.

Try to obtain a financial statement submitted with a recent loan application, to determine whether any financial stress was present at that time. Read Loretta Campbell's, "Target Co., Inc.: Balance Sheet," in Part II of this Manual, for indicators of possible fraud in balance sheets.

Obtain from the owner a list of his suppliers, sub-contractors, etc., interview them and try to get copies of their sales receipts to the owner. Compare them to his claim.
Unable to locate insurance claims agent, or he is unresponsive.

- Attempt to verify the policyholder's insurance company through the Property Insurance Loss Register (PILR).
- Contact the regional or district claims manager, who generally is more responsive to law enforcement than a local claims agent overloaded with work. Failing that, go to the national office claims manager or legal counsel. Insurance companies will usually be quite cooperative if the investigator insists on dealing with a senior manager or executive.

Review of all business records and available intelligence indicates owner had no identifiable motive to burn the property.

- Owner may not have burned or arranged to burn the property. Check motives of partner, employees, lienholders, or competitors.
- Examine possibility that a financial statement was falsified to hide financial problem, and owner actually did have a problem but a hidden one. Review Campbell's Tactical Guide, "Target Co., Inc.: Balance Sheet," in Part II of this Manual.
- Examine the possibility of arson to conceal embezzlement or burglary, or to drive that owner out of business.
- Examine the possibility of a disgruntled employee or unresolved labor-management grievance.

The fire was labeled as "incendiary" but the motive was listed as "juvenile vandals" or some motive other than fraud.

- The fact that a competent cause and origin investigation resulted in an incendiary determination is the main factor here.
- The label "caused by juvenile vandals" is probably speculation by the fire chief (who should be asked to explain this determination). If the ensuing investigation warrants filing of arson or fraud charges growing out of a fraud motive, the more powerful inference from that evidence will probably prevail over the initial speculation of motive listed on the incident report.

E. The Special Issue of Circumstantial Evidence

The issue of developing sufficient evidence to support a prosecution when most or all of it is circumstantial is an enduring problem in arson investigation. Further complications can follow when a fraud approach is taken to an arson-for-profit case. In many cases there are steps that an investigator can take to improve the quantity and quality of the circumstantial evidence he obtains and to use some types of circumstantial evidence to build more direct evidence. The discussion below is not an attempt to offer a simple formula for building a perfectly solid circumstantial case—the term alone is something of a contradiction. Rather, the following are additional suggested steps the investigator might take to make the most of whatever evidence he has been able to obtain.

The first step is to review thoroughly the Tactical Guide which covers circumstantial evidence, in Part II of this Manual. Prosecutors in particular should consult Appendix II to that guide, which provides case citations, and also the "Bibliography" of law review articles on circumstantial evidence in general, and arson in particular. Second, find the
nearest prosecutor who has successfully handled arson-fraud cases involving circumstantial evidence and arrange a conference or briefing session with him to determine what he did to achieve his results. In many cases, prosecutors with successful track records have taken the same type of circumstantial evidence and augmented its strength by providing charts and graphs of key event dates, and business and (allegedly) illegal transactions. Such graphic simplifications can educate a prosecutor, law enforcement management, and a jury about dates and facts that otherwise can seem like loose fragments. The successful prosecutor might have other techniques of pre-trial preparation, including a degree of self-education in fire cause and origin terminology and criminalistic methods.

Where the investigator has gathered all of the evidence he feels is possible, but the prosecutor feels that the case is too weak to justify seeking an indictment, there are several specific steps the investigator can take that may improve the situation. These are:

- Consider the option of developing the case in a "tandem" manner, using circumstantial evidence to persuade one member of an arson conspiracy to cooperate with the prosecution. The owner or other figure(s) in the investigation may commit a perjury or false statement violation, which, if charged, could bring about the cooperation of that participant and his future testimony against the others. Where the investigator feels he has some, but not enough, information, he might early in the investigation contact the insurance company and determine the possibility of company action to deny payment. If valuable information has been obtained by the insurance company, the investigator should obtain that evidence, either through a provision covered by a state immunity law or by subpoena.

- Whether the owner acted alone in the arson-fraud or was joined by others, the circumstantial case can be tightened by obtaining expert opinions (and potential expert testimony) on certain facets of the evidence. In addition to expert information on the fire cause and origin, the investigator should consider obtaining expert advice on other strange occurrences and coincidences, in the hope that a qualified expert can take something that strikes the investigator as "unusual," and, based upon the opinion of the expert, further qualify it as "highly improbable." Examples of experts who might be of assistance in assessing the quality of circumstantial evidence include salvage, accounting and bookkeeping (especially forensic or investigative accountants), contracting, urban planning, and other specialists whose relative importance should be determined by the technical requirements of the evidence under consideration. The reader might also review the Forensic Services Directory, which is profiled in Chapter 8, for identification of a wider range of possible experts.

- Review the case with the Insurance Crime Prevention Institute (ICPI) in the event they might be able to obtain additional circumstantial or even direct evidence of a fraud-related offense.

- Consider the option of making appropriate notification to the insurance company that the criminal case file is being closed without filing charges. The company may choose to subpoena the law enforcement agency's file and use it in denying payment on the claim.

- Examine the possibility of a federal mail fraud, interstate travel, or other federal violation, and consider taking the circumstantial case to the United States Attorney if a federal violation appears to be involved.
CHAPTER 5: ANALYSIS OF ORGANIZED ARSON-FRAUD SCHEMES

Introduction

Where one or more arson-fraud specialists join an owner in a scheme, it is highly likely that the interactions of one with the other will follow a standard pattern. What follows here is a discussion of the more common forms and sequences of interactions between and among arson-fraud schemers. This discussion focuses on what seem to be the general rules governing such interactions, rather than on the exceptions. These findings should be treated as points of departure for the investigator to use in analyzing information on possible organized arson-fraud activity in his jurisdiction—and how it got to be that way.

I. Representative Patterns of Organized Arson-Fraud

The following charts and discussions can be used by the investigator for a number of purposes. First, they can be used to help make sense out of intelligence that has been collected but not fully or objectively analyzed on various types of arson-fraud scheme participants. Second, they can be used to help form the foundation for a new or expanded intelligence collection and analysis effort regarding such participants. Third, they can be used for training and orientation programs for unit personnel, to stress points such as the procedures which conspirators themselves use to recruit and set the terms of employment for other specialists they hire. Whatever use the investigator may make of the ensuing discussion, it is important to recognize that the following examples are taken from a limited number of successfully prosecuted cases. The types of specialists recruited into arson schemes and longer-term rings, and the order in which each is brought into the scheme or ring, demonstrate that the originating conspirator usually tries to keep communications among participants flowing in directions that are consciously...
chosen. The reason for this is to prevent the leakage of information to anyone on the outside (especially law enforcement personnel), but also to other scheme members who may be trusted to some extent, but who also might utilize that information if they are later pressured to cooperate with the authorities. Therefore, the following examples show that the placement of the "players" in arson-fraud conspiracies is often, by intentional design, arranged to confuse anyone who might want to backtrack events and interactions for the purpose of implicating scheme or ring members in a crime.

In contrast to the concepts generally embodied in conspiracy law, the following examples show that the organized arson-fraud criminal conspiracy often is more complex than the simple description of a core conspirator at the center, with the others at the periphery of the conspiratorial circle. Rather, conspiracies are often built of layers of specialists, buffers, and middlemen. The reasons for these arrangements can be traced as much to the criminal's passion for secrecy as to the way that each specialist's skill fits into the overall conspiracy. Consequently, the investigator who believes that he has implicated one specialist in an arson-fraud conspiracy should consider which probable co-conspirators are positioned at either side of the one implicated. By proceeding in this manner, the investigator may be able to reconstruct (1) the relationships among various participants in the conspiracy, and more importantly, (2) the sequence of initial contacts by which that specialist was brought into the conspiracy. It is the initial contact that spells out most clearly why that specialist was recruited, what he was hired to do, and how much he would get paid. For this reason, the sequence of initial contacts is noted in the following illustrations by a number inside a small triangle. The direction of these contacts is also noted by arrows pointing in the direction of the next contact. An inquiry which proceeds in the above manner can assist the investigator in identifying additional informants, potentially cooperative witnesses, and lines of both field and grand jury questioning.

The following discussion addresses the central initiating and coordinating roles played by key figures in setting up arson-fraud conspiracies:

- Pigeons
- Fire Brokers
- Speculators
- Advisors/Coaches

A. Pigeon Initiated Schemes

Where a pigeon is the specialist who helps set an arson-fraud scheme into motion, his presence in such an activity is indicated by his usual absence after the initial contact with the owner. That is in keeping with the pigeon's primary function as a contact person who puts the owner (who wants to arrange a fire) in touch with a specialist--usually a torch (who wants to sell his firesetting services). The investigator who begins the search for a pigeon as the key schemer behind a particular arson may have difficulty, particularly because the pigeon normally moves into the background after the owner and torch strike their illicit bargain. The first illustration demonstrates an arson-fraud scheme instigated by a pigeon who chose not to fade early, but to remain around for long enough to recruit a public adjuster to handle the claim.

In Chart I, the pigeon was an ostensibly legitimate businessman in the community who tried to assist businessmen in financial trouble. That pigeon heard of the problems of an owner who had let several of his associates know of his declining business condition. Some of that information trickled to the pigeon, who approached the owner and suggested an arson-fraud scheme. The owner agreed, whereupon the pigeon contacted a local fire broker who, at that time, was just beginning to assemble arson-fraud schemes. The fire broker
<table>
<thead>
<tr>
<th>State</th>
<th>Year Legislation Enacted</th>
<th>Beneficiaries</th>
<th>Maximum Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minnesota</td>
<td>1974</td>
<td>victims; intervenors; dependents; victims' estates; persons who assume costs for the victim</td>
<td>$25,000</td>
</tr>
<tr>
<td>Montana</td>
<td>1977</td>
<td>victims; intervenors; dependents</td>
<td>$25,000</td>
</tr>
<tr>
<td>Nebraska</td>
<td>1978</td>
<td>victims, intervenors; dependents; persons responsible for maintenance of the victim</td>
<td>$10,000</td>
</tr>
<tr>
<td>Nevada</td>
<td>1969</td>
<td>intervenors; dependents; persons responsible for the injured party</td>
<td>$5,000</td>
</tr>
<tr>
<td>New Jersey</td>
<td>1971</td>
<td>victims; intervenors; dependents; persons responsible for maintenance of the victim</td>
<td>$10,000</td>
</tr>
<tr>
<td>New York</td>
<td>1967</td>
<td>victims; dependents</td>
<td>unlimited medical; $20,000 wage loss</td>
</tr>
<tr>
<td>North Dakota</td>
<td>1975</td>
<td>victims; intervenors; dependents</td>
<td>$25,000</td>
</tr>
<tr>
<td>Ohio</td>
<td>1975</td>
<td>victims; intervenors; dependents; specific third persons</td>
<td>$50,000</td>
</tr>
<tr>
<td>Oregon</td>
<td>1977</td>
<td>victims; intervenors; dependents</td>
<td>$23,000</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>1976</td>
<td>victims; intervenors; dependents</td>
<td>$25,000 loss of earnings/support; $15,000 death benefits</td>
</tr>
<tr>
<td>Rhode Island&lt;sup&gt;a&lt;/sup&gt;</td>
<td>1976</td>
<td>victims; dependents; persons responsible for maintenance of the victim</td>
<td>$25,000</td>
</tr>
</tbody>
</table>

<sup>a</sup>The Rhode Island statute will not go into effect until passage of federal victim compensation legislation.
Table 1 (continued)

<table>
<thead>
<tr>
<th>State</th>
<th>Year Legislation Enacted</th>
<th>Beneficiaries</th>
<th>Maximum Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tennessee</td>
<td>1976</td>
<td>victims; intervenors, dependents, persons responsible for maintenance of the victim</td>
<td>$10,000</td>
</tr>
<tr>
<td>Texas</td>
<td>1979</td>
<td>victims; intervenors; dependents</td>
<td>$50,000</td>
</tr>
<tr>
<td>Virginia</td>
<td>1976</td>
<td>victims; intervenors; dependents</td>
<td>$10,000</td>
</tr>
<tr>
<td>Washington</td>
<td>1974</td>
<td>victims; intervenors; dependents</td>
<td>unlimited, amounts set by Workmen’s Compensation</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>1976</td>
<td>victims; intervenors, dependents; persons responsible for maintenance of the victim</td>
<td>$10,000</td>
</tr>
</tbody>
</table>

Support for Victim Compensation

Since the mid-1960s, considerable national attention has been given to the concept of victim compensation:

- At its Annual Conference on October 6, 1966 the International Association of Chiefs of Police adopted a resolution calling for state and/or federal legislation to indemnify the victims of violent crime and their surviving dependents.

- In 1967, the President’s Commission on Law Enforcement and the Administration of Justice released *The Challenge of Crime in a Free Society*. That report states: “the Commission believes that the general principal of victim compensation . . . is sound and that the experiments now being conducted with different types of compensation programs are valuable.”

- In 1970, the National Conference of Commissioners on Uniform State Laws began the development of a model crime victim compensation bill. Three years of work culminated in the adoption of the Uniform Crime Victims Reparations Act. The House of Delegates of the American Bar Association approved this act in 1974. A copy of the Act is included in the Appendix.

- Over the past two decades, numerous bills requiring federal support for victim compensation have been introduced in the U.S. House and Senate. The latest measures introduced in the House (H.R. 4257) and the Senate (S. 190) call for federal subsidies of state victim compensation programs and set certain standards which programs must meet to qualify for supplemental funding. (A copy of the House bill is provided in the Appendix.)
• In 1980, the National Institute of Justice initiated a series of workshops on compensating the victims of crime under its criminal justice research utilization program. Through these workshops, held in 8 locations across the country, policymakers investigate the types of compensation available and the range of existing methods for providing compensation.\

Costs of Victim Compensation

Throughout the history of crime victim compensation in the United States, program cost has been the single most important issue for government executives, legislators, and program operators. Major concerns center around the possible financial impacts of the compensation program and the advisability of establishing new financial assistance programs in the face of growing public concern over rising government expenditures. Cost considerations have had a considerable impact on the development of victim compensation in the United States:

• Implementation of compensation legislation has been delayed or prevented in some areas. Rhode Island passed a compensation bill but stipulated that implementation was contingent upon passage of a federal compensation statute. Louisiana also enacted a compensation statute, but repealed the legislation when faced with the prospect of implementing the program without federal support.

• Almost half the states have not yet passed compensation statutes. For many, concern about cost is the major obstacle.

• Numerous attempts have been made to enact a federal crime victim compensation statute providing financial support to state programs. At least in part, opposition to federal involvement has revolved around the issue of cost.

• Cost considerations also affect the form and operations of existing compensation programs. Most victim compensation schemes contain provisions restricting victim eligibility and benefit payments. Minimum loss criteria, maximum payment levels, and limitations on types of losses compensated are all intended as cost-saving measures.

While costs continue to be a legitimate concern for policymakers, the experience of existing compensation programs shows that the actual expenditures of victim compensation programs are relatively low. The National Institute's Crime Victim Compensation—Program Model which provides detailed cost information on the yearly administrative expenses and benefits payments of 18 programs shows a range from approximately $44,000 to almost $5.5 million. As may be expected, smaller states and those with lower caseloads spent considerably less for victim compensation than larger states. The effect of state size on compensation costs was demonstrated in the Program Model, which found that the range among state benefit expenditures was far less dramatic when examined on a per capita basis. On the average, programs spent only $.18 per resident per year on benefit payments; half the states spent $.12 per capita or less.

Many are concerned that attempts to contain costs through eligibility and benefit restrictions may unduly limit victim access to the compensation program. For example, one estimate shows that only 8 percent of the injured victims of violent crimes would qualify for compensation under current eligibility restrictions.

This concern, coupled with states' growing familiarity with the resource demands of compensation efforts, has prompted a number of states to ease some limitations. For example, Alaska and Minnesota raised their maximum benefits from $10,000 to $25,000, while New York State eliminated its minimum loss criteria. As more states gain experience in operating compensation programs and estimating their costs, opposition and restrictions based on issues of cost may gradually be eliminated.
II. KEY FEATURES OF VICTIM COMPENSATION PROGRAMS

The various options for developing crime victim compensation programs are examined in depth in *Crime Victim Compensation—Program Model*, published in 1980 by the National Institute of Justice. Key features of compensation programs are noted below.

**Coverage.** Almost every program provides funds for unreimbursed medical costs, lost wages, loss of support, and funeral expenses. Some states, such as California, also cover the cost of rehabilitation services. A number of states reimburse the expense of replacing the services which the victim would have performed free of charge for his or her family. Although less common, some states also cover treatment costs for psychological injuries resulting from crimes. Property loss is compensated only under very limited circumstances.

**Eligibility.** Persons eligible for compensation generally include victims of crime, intervenors (persons who have attempted to prevent a crime or aid a law enforcement officer), and the dependents of deceased victims and intervenors. In addition, some statutes allow compensation to persons who have incurred expense for the maintenance or care of an injured victim. Common restrictions on eligibility include residency requirements, minimum loss criteria and financial need requirements. Persons who contribute to their own injury may be denied compensation; those who are related to the offender or who have failed to report the crime are almost always excluded. Several of these restrictions have been challenged by practitioners and researchers alike.

**Application Process.** Victim compensation programs require claimants to submit a written application which provides information on (1) the criminal incident giving rise to the claim and (2) the financial losses resulting from the crime. The forms vary greatly in terms of length, complexity, and intrusiveness. Information on the application is verified, and if necessary, additional information may be sought through an investigation; the extent of verification and investigation carried out differs considerably among programs. Hearings are a common feature in many states. Most states conduct these proceedings on an as-needed basis; however, some programs conduct hearings on every claim, while others conduct no hearings at all.

**Claims Decisions.** The procedures and personnel used for claims decisions are determined by the placement of the program and the specific claims processing options prescribed in the victim compensation statute. In most cases, the initial decision is open to review or appeal. In some programs, appeals may be held at two levels: internal/administrative and judicial. However, it is not uncommon for programs to offer only one of these two appeal procedures.

**Public Awareness.** Lack of public awareness of victim compensation services and requirements is a major problem. Some programs make no special effort to improve this situation, fearing that widespread public awareness will result in substantial increases in claims volumes and subsequent strains on the program budget. Other programs assume responsibility for public awareness by instituting one or more of the following procedures:

- distribution of printed materials such as brochures and posters;
- use of public service announcements on radio and television;
- news coverage of the program's activities and services; and
- paid advertisements.

**Outreach.** Some programs go beyond simple public awareness efforts. Rather than relying on the victim to take the initiative, these programs contact victims directly. Among the available outreach approaches are:
• requiring the police to inform every violent crime victim of the compensation program. Such an approach was implemented in New York in 1977, and preliminary results indicate a noticeable increase in victims' awareness following implementation.9

• enlisting the assistance of other agencies which are likely to come into contact with crime victims: hospital emergency rooms, social service agencies, and victim/witness assistance programs. These groups can easily notify victims of the compensation program benefits and procedures.

• providing individualized notification. Under this system, police incident reports are screened and all potentially eligible victims are sent information concerning victim compensation. Notification may be carried out by compensation program staff, police agencies, or victim/witness assistance groups.

Benefits. Victim compensation programs cover a wide variety of expenditures relating to criminal injuries. Most programs provide for:

• all medical costs not reimbursed through other sources;
• unreimbursed loss of earnings;
• payments for loss of support for dependents of deceased victims;
• funeral costs;
• medical costs of the deceased victim; and
• short-term emergency awards for claimants who may experience severe financial difficulty without immediate assistance.

In addition to these basic benefits, some programs offer:

• reimbursement for rehabilitation training;
• reimbursement for the costs of replacing the services which the victim would normally provide for the family free of charge;
• replacement of certain medical devices such as hearing aids, eyeglasses, or artificial limbs;
• attorneys' fees incurred by victims engaging in the compensation process;
• costs of psychiatric treatment necessitated by the crime;
• compensation for disability or disfigurement; and
• in some rare cases, awards for pain and suffering.

Award Limitations. Almost every program places some maximum limit on the benefits offered, usually ranging from $10,000 to $50,000. In general, the limits are viewed as cost-saving measures. However, a number of programs, such as those of New York, Alaska, and Minnesota, have raised their maximum limits as they have gained greater experience with the demands of victim compensation.6,8 It is also common for programs to limit weekly payments to some specific maximum, usually between $100 and $250. Maximums may also be set on particular categories of benefits, such as attorneys' fees, funeral costs, or wage loss. In addition to maximum limits, many programs require certain minimum losses or minimum deductibles. Commonly, these are expressed either as a minimum dollar loss, ranging from $25 to $250, or some minimum time lost from work, usually one or two weeks. Again, these criteria are intended to reduce program costs.
Payment Methods. Depending on the amount and type of award, programs may offer either lump sum or protracted payments. The lump sum award is generally used in cases where the costs are easily determined and the award is moderate in size. Protracted payments, on the other hand, are used for large awards, for awards in which costs are not fixed, and for long-term disability or loss of earnings/support.
III. EXPANDING VICTIM SERVICES

Victim compensation programs are one component of the growing movement to provide services to the victims of crime. Programs’ participation in this broader movement can take several forms:

- establishment of working relations with criminal justice, health, and social service agencies;
- interdependent relations with victim service agencies for victim notification and referrals;
- development of direct victim service efforts by the compensation program;
- compensation program involvement in statewide coordination of victim service efforts.

Developing Interagency Liaison

Because victim compensation programs must rely on several different agencies and organizations throughout the state for information and assistance, it is essential that they develop standard working relationships with police departments, the courts, the medical community, the insurance industry, public assistance programs, and victim service groups. The delineation of complementary responsibilities is particularly important in order to minimize duplication of services and enhance the effectiveness of all groups.

A wide variety of techniques may be used to establish interagency relations. Key approaches include:

- prescribing interagency relations through the compensation statute, the program’s rules and regulations, or the procedures and forms used by the program.
- capitalizing on the prior relationships and personal contacts of compensation program staff. For example, staff members with backgrounds in law enforcement may be able to develop good relations with police agencies.
- ensuring that other programs are aware of the victim compensation programs by providing special training sessions or informational materials to staff of other agencies. In Minnesota, for example, the compensation program director regularly presents victim compensation training sessions at the Police Academy.10
- developing ongoing relations with professional organizations in the state, such as the bar association, hospital administrative and planning boards, medical associations, and local and statewide police organizations.

Problems which victim compensation programs may encounter in establishing these relationships include financial constraints, staffing limitations, and the large number of relevant agencies and organizations in the state.

Interdependent Relationships with Victim Service Agencies

Many local jurisdictions now offer specialized counseling and crisis intervention,11 assistance in obtaining community services, and special witness notification and support services for victims participating in the criminal justice process.12 In states with victim compensation programs, victim service groups have frequently taken the initiative to inform victims of the availability of compensation and to assist in preparing application materials. In turn, some victim compensation programs have developed cooperative relationships with local victim service groups, using them as a referral resource for needy victims.
contacted a torch and began to prepare the establishment for the fire. Since the pigeon knew of a public adjuster who handled fire insurance claims and would help a policyholder arrange a fraudulent proof of loss, the pigeon (not the fire broker) made the contact with that public adjuster and secured his participation in the scheme, whereupon the public adjuster began to work with the fire broker to arrange documentation to support a fraudulent proof of loss after the fire.

Common variations on the above pattern would find the pigeon filling part of the role played by the fire broker.

B. Fire Broker Initiated Schemes

An initial review of available intelligence on fire brokers and pigeons will usually reveal little which will enable the investigator, at the early stage, to distinguish which of those two specialists, or possibly another, helped to initiate that fire and fraud. The fire broker operates in a fashion similar to the pigeon, except that the fire broker stays around and, as part of his role, helps prepare each of the successive steps in the arson itself, as well as the insurance and perhaps other related frauds. In the example illustrated in Chart II, the fire broker initiated the scheme, and because of his fascination with the dynamics of firesetting, served as the master torch to arrange and prepare for the incendiary fire.

The fire broker was an ostensibly legitimate businessman who claimed to be in the occupation of searching for failing businesses, which he would try to sell to third parties who wanted to take over such concerns and turn them around into successful enterprises. Actually, the fire broker was searching for businesses with signs of financial stress, and once he gained the confidence of the new business owner he would present to that individual a very attractive package of arson and insurance fraud.

In this example, the fire broker located one such industrial concern and convinced the owner to go along with a plan for the massive destruction of his premises. Once the
owner consented (with little persuading), the fire broker contacted a torch (who had a degree in chemistry), and who had worked for the fire broker on prior occasions. Soon thereafter, the owner briefed his business partner on the scheme, and instructed the partner to coordinate with the fire broker, and to serve as the owner's buffer, or "go between," in all future contacts and negotiations concerning the arson. Promptly, the partner began dealing with the fire broker to arrange access for the broker and torch to survey the premises. The partner also revised the security guard shift schedule so that no one would be in the building at the time of the arson. Because the building was of concrete cinder block construction, the torch prepared an especially potent accelerant designed to explode on ignition and destroy the roof and supporting beams. Since the schemers anticipated complete destruction (which later occurred), they expected to obtain the full value of the insurance coverage, which totaled roughly $4 million. Hence, a corrupt public adjuster was not involved in this scheme. It appears more characteristic of industrial rather than commercial arson-frauds that a corrupt public adjuster is not recruited because the multi-million dollar insurance coverage normally provides enough profit to satisfy the schemers.

C. Speculator Initiated Schemes

Speculator initiated schemes are noted for the presence of a businessman who functions as a principal investor in the purchase of residential, commercial, or industrial buildings, for the sole purpose of arranging to burn them after the purchase. He may also buy them through a straw, but with the same objective in mind. For this reason, the business records of the speculator and the individual investment property or business which he purchased may indicate little if any financial stress, although the properties may be extremely depressed or in a deteriorating section of town at the time of purchase.
1. **Industrial Establishment.** In the case illustration shown in Chart III, an owner of an industrial establishment wanted to get out of that business and he began to look for a buyer. For this, he went to a real estate broker who, in addition to making a legitimate living in that business, also scouted around for properties which might be set up for arsons. The real estate broker contacted a fire broker, who conceived of a plan to find a new owner who would be aware at the outset of the possibility of purchasing that concern in order to burn it soon afterward. An interested buyer was found after several other prospective buyers were offered a chance to invest but declined because they did not have enough cash for the down payment. After the new owner agreed to the proposition, the fire broker, through an assistant, recruited a torch who in turn enlisted the services of an assistant who specialized in the use of detonating devices and discharging them via radio remote control. The reason for the enlistment of such a specialist was the nature of the establishment (a large dry cleaning plant) which was of very solid concrete and steel construction. The plant was later destroyed in the explosion and fire. In this case illustration, a public adjuster was not involved in processing the claim.

2. **Residential Properties.** The speculator referred to in Chart IV bought low cost, multi-residential buildings located in a downtown section of a large city. The buildings were usually vacant and badly in need of repair. As legitimate real estate sales became unprofitable, the speculator turned to arson. He would insure the property at inflated rates and then set his own fire, or arrange for his son or an associate to set one, in order to collect the insurance proceeds.

The speculator soon enlisted the support of his son as an assistant. A contractor and long time acquaintance of the speculator was also approached and subsequently agreed to assist the speculator in the purchase of low cost property and
the torching of same. The contractor, in turn, knew a bank official who was carrying several uncollectable loans and listing them as accounts receivable. The contractor introduced the speculator to the banker, and an arrangement was made for the speculator to purchase the uncollectable loans at face value ($92,000) in return for a $210,000 mortgage loan on several worthless properties. The bank was made the beneficiary of the insurance policy. The plan called for the mortgage loans to be satisfied by using the post-arson insurance settlement.

As the number of buildings involved in the scheme increased, the speculator's son (also his assistant) enlisted three of his associates into the group for assistance. Two served as both straws and torches under the guidance of the speculator's son. The other served only as a straw. As straws, the three men used their names on official property records even though insurance proceeds were signed over to the speculator or his son. A small portion of each insurance settlement was returned to the three straws for their participation in the scheme. At one point during this two-year scheme, two additional torches were hired to start arson fires, but these two did not become a regular part of the conspiracy, and they were never apprehended.

The above case was broken when the contractor, who was the victim of an extortion growing out of other criminal activity, was interviewed by police regarding the extortion. The contractor, asked also about the arsons, subsequently agreed to cooperate with the police in solving the arsons if he were granted immunity from prosecution. He was outfitted with a body transmitter and went back to interact with other members of the arson-fraud conspiracy about past fires and procedures for effecting the unresolved insurance settlements. After the indictment of the other scheme participants, the three torches and straws implicated in the scheme by the contractor agreed to cooperate with the authorities in testifying against the
speculator and his son. The bank officer was indicted on
perjury charges growing out of his conversations with the
contractor when the latter was cooperating in an undercover
role with the investigators.
D. Advisor or Coach Initiated Schemes
Friends or associates of an officer may serve as the impetus
behind an arson-fraud conspiracy by coaching or advising him.
As the following charts and discussion make clear, the steps
that a coach or advisor take after agreement with the owner on
the arson-fraud scheme are similar, if not identical, to the
courses of steps which a fire broker would take. The
distinction, however, is that the advisor or coach usually does
not receive compensation for his services, but performs them
out of friendship or concern for the welfare of the owner.
1. Industrial Establishment. In the illustration shown in
Chart V, the owner was having serious financial difficulty
because the technology in his field was advancing at a very
fast pace, and his sales were falling dramatically because he
had not innovated at a comparable pace. The establishment
which burned was a subsidiary of a larger corporation which
filed for a Chapter 11 (debt reorganization) bankruptcy several
months before the arson in this plant.

The owner had confided in several people his desire to find
a suitable solution to the financial problems of that
subsidiary plant. An individual who served as his financial
advisor pondered the range of problems and options and arrived
at an arson-fraud scheme which would require the use of
explosives to destroy the industrial plant, a huge structure
which spanned over ten square city blocks. From that point,
the advisor served in a capacity similar to a fire broker and
hired a master torch from another state as the prime contractor
to arrange for the incendiary destruction. The master torch,
in turn, hired an assistant torch who was expert in the use of
blasting devices. A driver was also hired to transport a
number of 50-gallon drums of accelerant from another state via
rental van to the site of the industrial plant.
Five weeks after the occurrence of the incendiary fire, which destroyed the industrial plant, the perpetrators were arrested. The key figure in breaking the conspiracy was the assistant torch, who was identified through a variety of motel records, turnpike receipts, and physical description investigative checks, and whose father sold dynamite and blasting caps to mining operations. Based upon the circumstantial evidence linking him to this fire, as well as direct evidence linking him to another arson, the assistant torch agreed to plead guilty and cooperate with the prosecution in incriminating the other defendants about whose participation he had knowledge. That evidence included substantial dealings with the master torch and the advisor, the latter of whom served as a sort of first-line supervisor at the plant on the evening of the arson. Only weak, circumstantial evidence on the owner's involvement was available, and although indicted, the owner was acquitted of those charges.

2. Commercial Establishment. In the illustration shown in Chart VI, the advisor to the owner was his personal and business attorney, and he also doubled as his financial advisor. In this example, the owner was having serious financial problems with a furniture store. He contacted his attorney in the hope of arranging a substantial bank loan in order to tide himself over until the business turned around. The attorney contacted a labor union official, who doubled as a torch, and the union official, in turn, contacted his financial consultant, who was also a former bank officer. The financial consultant advised them that even if the business books were altered substantially in order to give the appearance of a viable enterprise, the amount of the loan which they could reasonably expect (about $35,000) was too low to provide the kind of relief which the owner sought and expected (at least $100,000).

With the abandonment of that option, the attorney and the union official developed an arson-fraud proposal which they...
presented to the owner. The owner initially rejected it because he did not want to destroy the business—only turn around its financial condition. The attorney and fire broker then waited for a period of time until the business condition worsened further, and presented it to the owner a second time, at which point he consented to the scheme. Then, the attorney worked with the owner, the business bookkeeper, and the financial consultant to falsify the business books in order to give the appearance of a higher value of furniture sales. This was done to lay the groundwork for an eventually inflated claim for building and contents damage, as well as a substantial business interruption claim.

After the financial groundwork for the eventual fraud was laid, the fire broker recruited a torch to set the fire. The torch surveyed the property and met several times with the owner to finalize plans for the incendiary destruction through the use of large quantities of napalm. Following consummation of these plans, the attorney-advisor recommended to the owner a public insurance adjuster who could be relied upon to help press vigorously the fire and business interruption insurance claims. The adjuster then was brought into the conspiracy and worked with the owner, attorney, and bookkeeper (but not the fire broker, financial consultant, or torch).

After several bouts where the owner cancelled and rescheduled the fire, the arson occurred. The case was broken after the financial consultant was arrested in an unrelated counterfeiting case and agreed to cooperate in the arson-fraud investigation. He identified the business bookkeeper as the weakest link in the conspiracy. Subsequent interviews confirmed that judgment and the bookkeeper confessed and agreed to testify against the other principals in return for a grant of immunity from prosecution.

While this case demonstrates the central role of an advisor to the owner who sets up the arson-fraud scheme, it should be noted that the attorney-advisor in this case expected a monetary reward for his services. That payment was to be made in the form of a percentage interest in a new business which was to be constructed on the site of the original furniture business. Since the investigation and prosecution intervened to prevent the fruition of that scheme, the advisor did not realize any profit from his participation.

II. Unraveling Arson-for-Profit Conspiracies

Apart from the owner who sets the fire and submits the fraudulent claim himself, conspiracy is an important element to pursue in an arson-fraud investigation. However, the structure of conspiracy law, especially at the state level, can make development of a case based on this charge very difficult.

Often, the legal conceptualization of criminal conspiracy—with the core conspirator at the hub and all the others on the periphery—does not accurately capture the variety of incriminating relationships and specialized illegal transactions in organized arson-fraud schemes. Therefore, it is important to look at which criminal or business specialist is most likely to have entered into an illicit transaction with the others, when that contact was likely initiated, and what the overall network of such transactions looks like as we view all of the participants in the conspiracy.

Where the investigator suspects some degree of organization in the arson-fraud scheme, but initially is not sure how many or who (besides the owner-insured) might be involved, it is important to prepare a set of questions about the probable participants and then proceed to answer them. Some initial questions are set forth below.

1. Did the owner-insured initially contact a (a) torch, (b) pigeon, (c) fire broker, or (d) coach/advisor, or did one of them approach him? When, how, and why did that initial contact occur that way?

2. Based upon the presence or absence of the owner’s financial stress at the time of the initiation of the conspiracy (not the time of the fire), did the owner require persuading in order to agree to arson?
AN ACT to amend the executive law, in relation to the powers and duties of the crime victims compensation board and to repeal subdivision nine of section six hundred twenty-three of such law, relating thereto.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

§ 1. Section 1. Legislative findings and intent. The legislature hereby finds and declares that:

1. The continued prevalence of violent crime has placed a great strain on the criminal justice system of the state.
2. The emphasis by most criminal justice agencies on the apprehension, prosecution, rights, care, punishment and rehabilitation of the criminal offender has sometimes led to the neglect of the rights and interests of innocent victims of crime.
3. Recent studies have indicated that nearly one-half of violent crimes in large cities go unreported by crime victims.
4. The ability of the criminal justice system to reduce crime depends in large part on the cooperation and participation of citizens, particularly crime victims.
5. It is the intent of the legislature, by this legislation, to strengthen and expand the role of the crime victims compensation board so that the board may actively speak for and advocate the rights and interests of crime victims throughout the state, thereby encouraging a restoration of faith by citizens in the criminal justice system and an eventual reduction in the overall rate of violent crime.

§ 2. Subdivision three of section six hundred twenty-three of the executive law, as added by chapter eight hundred ninety-four of the laws of nineteen hundred seventy-eight, is amended to read as follows:

EXPLANATION — Matter in italics is new matter to be inserted [ ] old law to be omitted.

1. To adopt, promulgate, amend and rescind suitable rules and regulations to carry out the provisions and purposes of this article, including rules for the approval of attorneys' fees for representation before the board or before the appellate division upon judicial review as provided for in section six hundred twenty-nine of this article, and rules for the authorization of qualified persons to assist claimants in the preparation of claims for presentation to the board or board members.
2. To establish and maintain a special investigative unit to expedite processing of claims by crime victims and special emergency situations, and to promote the establishment of a volunteer program of home visits to elderly and isolated victims of violent crime.
3. To advise and assist the governor in developing policies designed to recognize the legitimate rights, needs and interests of crime victims.
4. To coordinate state programs and activities relating to crime victims.
5. To cooperate with and assist political subdivisions of the state in the development of local programs for crime victims.
6. To study the operation of laws and procedures affecting crime victims and recommend to the governor proposed changes to improve the administration and effectiveness of such laws.
7. To establish an advisory council to assist in formulation of policies on the problems of crime victims.
8. To advocate the rights and interests of crime victims of the state before federal, state and local administrative, regulatory, legislative, judicial and criminal justice agencies.
9. To promote and conduct studies, research, analyses and investigations of matters affecting the interests of crime victims.
10. To oversee conferences relating to the problems of crime victims.
11. To serve as a clearinghouse for information relating to crime victims problems and programs.
12. To cooperate, with the approval of the governor, on all matters, including federal grants, or any gift for the purposes of this article, any money or anything received may be expended by the board to effectuate any purpose of this article, subject to the applicable provisions of the state finance law.
13. To render each year to the governor and to the legislature a written report on the board's activities and the manner in which the rights, needs and interests of crime victims are being addressed by the state's criminal justice system.
14. § 4. This act shall take effect immediately and shall remain in full force and effect for one year from the date this act shall have taken effect.
UNIFORM CRIME VICTIMS REPARATIONS ACT

Drafted by the
NATIONAL CONFERENCE OF COMMISSIONERS
ON UNIFORM STATE LAWS

and by it

APPROVED AND RECOMMENDED FOR ENACTMENT
IN ALL THE STATES

at its

ANNUAL CONFERENCE
MEETING IN ITS EIGHTY-SECOND YEAR
AT HYANNIS, MASSACHUSETTS
JULY 26-AUGUST 2, 1973

WITH PREPATORY NOTE AND COMMENTS
APPROVED BY THE AMERICAN BAR ASSOCIATION AT ITS MEETING IN
HOUSTON, TEXAS, FEBRUARY 5, 1974

The committee which acted for the National Conference of Commissioners on Uniform State Laws in preparing the Uniform Crime Victims Reparations Act was as follows:

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NATIONAL CONFERENCE OF COMMISSIONERS ON
UNIFORM STATE LAWS
645 North Michigan Avenue, Suite 510
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PREPATORY NOTE

This Act establishes a state-financed program of reparations to persons who suffer personal injury and dependents of those who are killed by criminally injurious conduct or in attempts to prevent criminal conduct or to apprehend criminals. Reparations are measured by economic loss such as medical expenses, loss of earnings, and costs incurred in obtaining services as a substitute for those the victim would have provided. Throughout, the emphasis is on the victim rather than the perpetrator of the crime.

The civil and criminal liability of the offender is not covered by this Act; save for provisions directing the offender to reimburse the State. The actual financial return to the State through this mechanism is not anticipated to be large, and a realistic appraisal is that the costs of the program will be borne by the State and its citizens. A variety of limitations and exclusions stated in the Act are designed to limit those costs. The suggested maximum allowance of $50,000 per victim, the exclusion of motor vehicle accidents (with some exceptions), and elimination of pain and suffering as an element of awards are illustrations.

Probably the most perplexing policy choice to be made by any state instituting a program of this sort relates to the relevance, if any, of the financial condition of the victim. Some would further reduce costs by denying reparations to victims able to bear the economic loss caused by crime. Others would conclude that the victim's losses should be borne by the State irrespective of his financial resources. This Act is drafted to accommodate either choice, but the clear preference is to eliminate any "financial needs" or "financial stress" test as a condition precedent to receipt of benefits. For those states taking the other view, the Act contains a provision including this condition but defining it in terms of financial hardship or stress rather than "need." The objective of that definition is to ensure that the program is not an unnecessary substitute for welfare but is a program to protect against substantial changes in life style caused by losses through crime.

A kindred issue is that of allocation of criminally caused loss through personal injury among competing sources of payment such as insurance, workers' compensation and Social Security. This Act reflects the policy choice that these programs are primary. Implementation of that policy occurs in two ways. First, insurers are not entitled to claim reimbursement from the State for their expenditures. Second, victims who have been paid, or who are entitled to be paid, by insurer will have their claims against the State fund reduced by the amount of available insurance. In somewhat overly simplistic terms, the policy of the Act is to preclude double recovery for any criminal incident.

Administration of the Act is entrusted to a three-man Board whose members will serve full or part time, depending upon the expected workload in any state. The Act includes procedural details which will be seen to parallel provisions of the Uniform Administrative Procedures Act. Any State legislature in a state having such an administrative procedures act will be well advised to eliminate the duplicate provisions herein.

UNIFORM CRIME VICTIMS REPARATIONS ACT

1. Section 1. [Definitions.]
2. (a) As used in this Act, the words and phrases in this Section have the meanings indicated.
3. (b) "Board" means the Crime Victims Reparations Board created under Section 3.
4. (c) "Claimant" means any of the following claiming reparations under this Act: a victim, a dependent of a deceased victim, a third person other than a collateral source, or an authorized person acting on behalf of any of them.
5. (d) "Collateral source" means a source of benefits or advantages for economic loss otherwise repayable under this Act.
6. (e) "Need" means a condition of emitting or need of the victim caused by losses through crime.
7. (f) "Service" means a service provided to the victim as a substitute for the services that would have been provided by the victim had not the crime occurred.

8. Paragraphs (a) through (d) of Section 3 are hereby repealed.

9. Under Section 3, the Board shall:
10. (a) Determine whether a victim is entitled to reparations under this Act; and
11. (b) If a victim is entitled to reparations under this Act, determine the amount and duration of such reparations.

12. The Board shall:
13. (a) In determining the amount of reparations under this Act, shall:
14. (1) Consider the nature and extent of the injury or loss to the victim;
15. (2) Consider the economic condition of the victim;
16. (3) Consider the economic condition of the perpetrator of the crime;
17. (4) Consider the personal financial responsibility of the victim;
18. (5) Consider the personal financial responsibility of the perpetrator of the crime;
19. (6) Consider any other factors the Board deems relevant.
20. (b) In determining the duration of reparations under this Act, shall:
21. (1) Consider the age and health of the victim;
22. (2) Consider the education and work experience of the victim;
23. (3) Consider the personal financial responsibility of the victim;
24. (4) Consider the personal financial responsibility of the perpetrator of the crime;
25. (5) Consider any other factors the Board deems relevant.

26. The Board shall:
27. (a) In determining the amount of reparations under this Act, shall:
28. (1) Consider the nature and extent of the injury or loss to the victim;
29. (2) Consider the economic condition of the victim;
30. (3) Consider the economic condition of the perpetrator of the crime;
31. (4) Consider the personal financial responsibility of the victim;
32. (5) Consider the personal financial responsibility of the perpetrator of the crime;
33. (b) In determining the duration of reparations under this Act, shall:
34. (1) Consider the age and health of the victim;
35. (2) Consider the education and work experience of the victim;
36. (3) Consider the personal financial responsibility of the victim;
37. (4) Consider the personal financial responsibility of the perpetrator of the crime;
38. (5) Consider any other factors the Board deems relevant.
COMMENT

The words "criminally injurious conduct" are used throughout this Act rather than the simple word "crime" because if the word "crime" were used, it would need to be given an artificial meaning. The reason is that not all crimes will result in reparations under this Act, and those crimes which are reparable fall under the definition here given for "criminally injurious conduct.

The definitions of "economic loss" and its components are derived, with essential modifications, from the Uniform Motor Vehicle Accident Reparations Act.

SECTION 2. [Award of Reparations.] The Board shall award reparations for economic loss arising from criminally injurious conduct if satisfied by a preponderance of the evidence that the requirements for reparations have been met.

SECTION 3. [Crime Victims Reparations Board.] (a) A Crime Victims Reparations Board is created [in the executive branch], consisting of three members appointed by the Governor [with the advice and consent of the Senate]. At least one member shall be a person admitted to the bar of this State.
(b) The term of office of each member shall be [6] years and until his successor is appointed and qualified, except that of the members first appointed each shall be appointed to serve for terms of [5], [4], and [3] years. A person appointed to fill a vacancy shall be appointed for the remainder of the unexpired term.
(c) The Governor shall designate a member who is admitted to the bar of this State to serve as chairman of the Board.
(d) Members shall [serve full time, receive an annual salary prescribed by the governor within the available appropriation not exceeding [ ] dollars,] [serve part time, and receive per diem of [ ] dollars per day.] and be reimbursed for actual expenditures incurred in performance of their duties in the same manner as State officials generally.
The duty to publicize widely the availability of reparations and information regarding the filing of claims thereof.

COMMENT
This section and section 8 contain details which are redundant in a state having an adequate Administrative Procedures Act. Incorporation of these details in this Act ought not to be taken as encouragement to repetitious legislation. Each state must tailor the Act to its situation, by eliminating needless procedural details.

This Act does not include elaborate requirements for public notice and hearings relating to the rule-making function of the Board, because the kinds of beneficiaries to be expected under this Act do not have an identifiable interest in procedural rules.

1. Section 5. (Application for Reparations; Awards; Limitations on Awards.)

(a) An applicant for an award of reparations shall apply in writing in a form that substantially to that prescribed by the Board.

(b) Reparations may not be awarded unless the claim is filed with the Board within one year after the injury or death upon which the claim is based.

(c) Reparations may not be awarded to a claimant who is the offender or an accomplice of the offender, nor to any claimant if the award would unjustly benefit the offender or his accomplice. Unless the Board determines that the interests of justice otherwise require in a particular case, reparations may not be awarded to the spouse of, or a person living in the same household with, the offender or his accomplice or to the parents, child, brother, or sister of the offender or his accomplice.

COMMENT
The victims of a large percentage of crimes are relatives by blood or marriage of the offender or his accomplice, or live in the same household with him. The award of reparations in these cases involves serious questions of policy. Among these questions is the cost of the program, the possibility of fraud and collusion, and other social judgments. The unjust enrichment legislation (c) should be included or omitted in an enacting section.

(d) Reparations may not be awarded unless the criminally injurious conduct resulting in injury or death was reported to a law enforcement officer within 72 hours after its occurrence or the Board finds there was good cause for the failure to report within that time.

(e) The Board, upon finding that the claimant or victim has not fully cooperated with appropriate law enforcement agencies, may deny, reconsider, or reduce an award of reparations.

(f) Reparations otherwise payable to a claimant shall be reduced or denied:

(1) to the extent the economic loss upon which the claim is based is recouped from other persons, including collateral sources, and

(2) to the extent the Board deems reasonable because of the contributory misconduct of the claimant or of a victim through whom he claims.

(g) Reparations may be awarded only if the Board finds that unless the claimant is awarded reparations he will suffer financial stress as the result of economic loss otherwise irreparable. A claimant suffers financial stress only if he cannot maintain his customary level of health, safety, and education for himself and his dependents without undue financial hardship.

(h) In making its finding the Board shall consider all relevant factors, including:

(i) the number of claimant’s dependents;

(ii) the usual living expenses of the claimant and his family;

(iii) the special needs of the claimant and his dependents;

(iv) the claimant’s income and potential earning capacity; and

(v) whether the claimant has other resources.

2. Reparations may not be awarded if the claimant’s economic loss does not exceed ten per cent of his net financial resources. A claimant’s net financial resources do not include the present value of future earnings and shall be determined by the Board by deducting from his total financial resources:

(i) one year’s earnings;

(ii) the claimant’s equity, up to $30,000, in his home; and

(iii) one motor vehicle; or

(iv) any other property exempt from execution under the general personal property exemptions statute of this State.

3. Notwithstanding paragraph (2):

(i) the board may award reparations to a claimant who possesses net financial resources in excess of those allowable under paragraph (2) if, considering the claimant’s income, life expectancy, physical or mental condition, and expectation of income including future earning power, it finds that the claimant’s financial resources will be exhausted during his lifetime; or

(ii) the Board may (A) reject the claim finally, or (B) reject the claim and reserve to the claimant the right to reopen his claim, if it appears that the exhaustion of the claimant’s financial resources is probable, in which event the Board may reopen pursuant to an application to reopen if it finds that the resources available to the claimant from the time of denial of an award were prudently expended for personal or family needs.

COMMENT
Inclusion of a requirement of economic need or financial stress on the part of the victim appears to be accountable only as a cost-reduction factor. While the argument that the State ought not bear the loss of persons rich enough to care for themselves has appeal, in essence it needs a welfare concept into a program not related to welfare. Inclusion of the test will unquestionably increase administrative costs by requiring elaborate investigations into the resources of each claimant. Any savings produced by a needs test may thus be dissipated in the cost of administering that test. On balance, then, elimination of any requirement of financial stress seems wise. If the test is included, however, a real threat to the integrity of the program is posed because a strict "needs" requirement will limit benefits of the program to persons already on welfare and thus be merely an exercise in bookkeeping. The details suggested in the criterion for economic stress are designed to prevent that result.

[(h) Reparations may not be awarded if the economic loss is less than $100.]

ALTERNATIVE A
[(i) Reparations for work loss, replacement services loss, dependent’s economic loss, and dependent’s replacement services loss may not exceed $200 per week.]

ALTERNATIVE B
[(i) Reparations for work loss, replacement services loss, dependent’s economic loss, and dependent’s replacement services loss may not exceed the amount by which the victim’s income is reduced below $200 per week.]
SECTION 8. [Contested Cases; Notice; Hearing; Records.]
(a) An award may be made whether or not any person is prosecuted or convicted. Proof of conviction of a person whose acts give rise to a claim is conclusive evidence that the crime was committed, unless an application for rehearing, an appeal of the conviction, or certiorari is pending, or a rehearing or new trial has been ordered.
(b) The Board may suspend the proceedings pending disposition of a criminal prosecution that has been commenced or is imminent, but may make a tentative award under Section 15.

SECTION 12. [Attorney's Fees.]
As part of an order, the Board shall determine and award reasonable attorney's fees, commensurate with services rendered, to be paid by the State to the attorney representing the claimant. Additional attorney's fees may be awarded by a court in the event of review. Attorney's fees may be awarded by a court in the event of review. Attorney's fees shall be in addition to awards of reparations and may be made whether or not reparations are awarded. It is unlawful for an attorney to contract for or receive any larger sum than the amount allowed.

SECTION 13. [Subrogation; Assignment; Allocation of Expenses.]
(a) If reparations are awarded, the State is subrogated to all the claimant's rights to receive or recover benefits or advantages, for economic loss for which and to the extent only that reparations are awarded, from a source which in or, if readily available to the victim or claimant would be, a collateral source.
(b) As a prerequisite to bringing an action to recover damages related to criminally injurious conduct for which reparations are claimed or awarded, the claimant shall give the Board written notice of the proposed action. After receiving the notice, the Board shall promptly (1) join in the action as a party plaintiff to recover reparations awarded, and (2) reserve its rights and do neither in the proposed action. If, as requested by the Board, the claimant brings the action as trustee and recovers reparations awarded by the Board, he may deduct from the reparations recovered in behalf of the State the reasonable attorney's fees, allocable by the court for that recovery.
(c) If a judgment or verdict indicates separately economic loss and non-economic detriment, payments on the judgment shall be allocated between them in proportion to the amounts indicated. In an action in a court of this State arising out of criminally injurious conduct, the judge, on timely motion, shall direct the jury to return a special verdict, indicating separately the awards for non-economic detriment, punitive damages, and economic losses.

SECTION 14. [Manner of Payment; Non-assignability and Exemptions.]
(a) The Board may provide for the payment of an award in a lump sum or in installments. The part of an award equal to the amount of economic loss accrued to the date of the award shall be paid in a lump sum and awarded for all economic loss that would accrue after the award is made may not be paid in a lump sum. Except as provided in subsection (b), the part of an award that may not be paid in a lump sum shall be paid in installments.
(b) At the instance of the claimant, the Board may commute future economic loss, other than allowable expense, to a lump sum but only upon a finding by the Board that:
(1) the award in a lump sum will promote the interests of the claimant; or
(2) the present value of all future economic loss other than allowable expense, does not exceed [$1,000].

(c) An award for future economic loss payable in installments may be made only for a period as to which the Board can reasonably determine future economic loss. The Board may reconsider and modify an award for future economic loss payable in installments, upon its finding that a material and substantial change of circumstances has occurred.
(d) An award is not subject to execution, attachment, garnishment, or other process, except that an award for allowable
expense is not exempt from a claim of a creditor to the extent that he provided products, services, or accommodations the costs of which are included in the award.

(e) An assignment or agreement to assign a right to reparations for loss accruing in the future is unenforceable, except (1) an assignment of a right to reparations for work loss to secure payment of alimony, maintenance, or child support; or (2) an assignment of a right to reparations for allowable expense to the extent that the benefits are for the cost of products, services, or accommodations necessitated by the injury or death on which the claim is based and are provided or to be provided by the assignee.

SECTION 15. [Tentative Awards.] If the Board determines that the claimant will suffer financial hardship unless a tentative award is made, and it appears likely that a final award will be made, an amount may be paid to the claimant, to be deducted from the final award or repaid by and recoverable from the claimant to the extent that it exceeds the final award.

SECTION 16. [Reconsideration and Review of Board Decisions.] The Board, on its own motion or on request of the claimant, may reconsider a decision making or denying an award or determining its amount. The Board shall reconsider at least annually every award being paid in installments. An order on reconsideration of an award shall not require refund of amounts previously paid unless the award was obtained by fraud.

(b) The right of reconsideration does not affect the finality of a Board decision for the purpose of judicial review.

(c) A final decision of the Board is subject to judicial review on appeal by the claimant, the [Attorney General], or the offender [in the same manner and to the same extent as the decision of a state trial court of general jurisdiction].

SECTION 17. [Reports.] The Board shall prepare and transmit annually to the Governor and the Legislature a report of its activities, including the name of the claimant, a brief description of the facts, and the amount of reparations awarded in each case, and a statistical summary of claims and awards made and denied.

SECTION 18. [Uniformity of Application and Construction.] This Act shall be applied and construed to effectuate its general purpose to make uniform the law with respect to the subject of this Act among those states enacting it.

SECTION 19. [Severability.] If any provision of this Act or the application thereof to any person is held invalid, the invalidity does not affect other provisions or applications of the Act which can be given effect without the invalid provision or application, and to this end the provisions of this Act are severable.

SECTION 20. [Title.] This Act may be cited as the Uniform Crime Victims Reparations Act.
To help States assist the innocent victims of crime.

A BILL

To help States assist the innocent victims of crime.

Be it enacted by the Senate and House of Representa-
tives of the United States of America in Congress assembled,
short title
SECTION 1. This Act may be cited as the "Victims of
Crime Act of 1979".

Powers of the Attorney General
SEC. 2. (a) Subject to the availability of amounts appro-
priated, the Attorney General shall make an annual grant
and may make supplemental grants for compensation of vic-
tims of crime to each State program that qualifies under sec-
tion 4. Except as provided in section 5, the grants made to
a qualifying State program under this Act with respect to
Federal fiscal year shall equal—
(1) 25 per centum of the then current cost, as de-
termined by the Attorney General, of such State pro-
gram with respect to qualifying crimes that are de-
scribed in section 7(8)(A); and
(2) 100 per centum of the then current cost, as
determined by the Attorney General, of such State
program with respect to qualifying crimes that are de-
scribed in section 7(8)(B).
(b) For the purpose of carrying out the provisions of this
Act, the Attorney General is authorized to—
(1) prescribe such rules as are necessary to carry
out this Act, including rules regarding the data to be
kept by State programs receiving assistance under this
Act and the manner in which these data shall be re-
ported to the Attorney General; and
(2) approve in whole or in part, or deny, any ap-
lication for an annual or supplemental grant under
this Act.
(c) Grants under this section may be made in advance or
by way of reimbursement. The Attorney General shall not
have the power to modify the disposition of any individual
claim that has been processed by any State program.

Advisory Committee
SEC. 3. (a) There is established an Advisory Committee
on Victims of Crime (hereinafter in this Act referred to as the
"Committee") which shall advise the Attorney General with
respect to the administration of this Act and the compensa-
tion of victims of crime. The Committee shall consist of nine
members, one of whom shall be designated the Chairman, all
appointed by the Attorney General. Seven members of the
Committee shall be officials of States with programs qualify-
ing under section 4. The Committee shall meet at least two
times a year, and at such other times as the Attorney Gen-
eral may direct. The term of office for each member of the
Committee shall be one year. The Committee shall remain in
existence until September 30, 1983.
(b) While away from their homes or regular places of
business in the performance of services for the Committee,
members of the Committee shall be allowed travel and trans-
portation expenses, including per diem allowance, in the
same manner and to the same extent as persons employed
intermittently in the Government service are allowed travel
and transportation expenses under subchapter I of chapter 57
of title 5 of the United States Code.

Qualifying State Programs
SEC. 4. (a) A State proposing to receive grants under
this Act shall submit an application to the Attorney General
at such time and in such form as the Attorney General shall
by rule prescribe. A State program for the compensation of
victims of crime qualifies for grants under this Act if the At-
torney General finds that such program is in effect in such
State on a statewide basis during any part of the Federal
fiscal year with respect to which grants are to be made and
that such program meets the following criteria:
3. Who would have been a likely (a) criminal specialist, or (b) business confidant or associate to have persuaded the owner on the arson-fraud option? (That individual probably knows everything there is to know—and all you need to know—about the owner's motive.)

4. Do the business books and records indicate that the bookkeeper or accountant falsified them? And if so, would such false entries (e.g., skimming) serve the function of (a) pre-paying the torch or pigeon, (b) giving a false appearance of high business volume, or (c) impression of deflated business activity for tax evasion purposes?

5. Did communication with the public insurance adjuster likely begin before the fire, and if so, how soon before?

6. Did efforts to increase insurance coverage or change the insurer prior to the fire indicate amateur coaching or expert outside assistance?

7. Who prepared the proof of loss form, and if it was done by a public insurance adjuster, what information is there on other possible arson-fraud involvements of that person?

An answer to each of the above questions may establish a transaction between the owner-insured (or other individual) and a criminal or business expert in arson-fraud. This leads to a branching from that point to additional questions which the investigator himself needs to answer. With a solid idea of the motive at the outset, the kinds of criminal and business specialists probably active in that type of arson-fraud should help the investigator pose more specific questions to pursue.

The next issue to be addressed is the approach which the investigator will take—either focusing on the owner at the center and hoping to work outward toward other members of the conspiracy, or focusing on the other scheme participants on the periphery and moving inward toward the owner, fire broker, or other principal at the core.

A. Starting at the Center, Working Outward, or "Inside-Moving-Out"

This is the more traditional of the two approaches, and it holds the distinct advantage of enabling the investigator to begin with those individuals whose identities are known: the owner, partners, and employees such as the bookkeeper. Investigators who take this approach usually expect to build an arson-fraud case by gathering all available circumstantial evidence on the owner-insured, the torch, and any other individuals such as partners who might have assisted the owner-insured in perpetrating the arson and/or insurance fraud.

Unless an eyewitness can be produced who places the owner or torch at or very near the fire scene at the time of the fire, the difficult task is trying to build a solid case, either wholly or largely on circumstantial evidence. (See in Part II of this Manual, the Tactical Guide by George Parry, "Circumstantial Evidence in Arson-for-Profit Investigations.") Such circumstantial cases are developed because investigators correctly piece together such information as the insured's deteriorating financial position, his acquisition of additional insurance just prior to the fire, and other factors such as the occurrence of the fire in a locked building.

However, even where such circumstantial evidence seems to the investigator to be overwhelming, the owner-insured customarily declines to plead guilty and cooperate in naming his accomplices or co-conspirators. Thus, in the absence of witnesses who can provide direct testimony on the identities and criminal activities of those who conspired with the owner-insured, it is going to be a continuing, difficult challenge to build a circumstantial case against the owner-insured as the core member, as well as the torch, partner, bookkeeper, etc., who may have participated with him.

A second approach which has proven successful is to focus on the torch whenever his physical description can be established or his identity inferred. Where torches
participate in other lines of criminal activity such as burglary or drug dealing, it may be possible to build a case against that torch on one of those non-arson charges. Once apprehended for such a crime and convinced of the likelihood of conviction, the torch may agree to cooperate in the solution of the arson(s) for which he is suspected. Depending upon the seriousness of the other charges pending against him, he may help solve the arsons in which he participated, or he may point the investigator toward the torch who set that fire and indiscreetly bragged about it. In this manner, the torch may be able to provide incriminating information and later testimony against the pigeon, fire broker, or coach who hired him or placed him in touch with the owner-insured. Where the torch may know the identity of other accessories or suspected co-conspirators, but does not have incriminating information about their arson-fraud transactions, merely their identification can be a tremendous boost to the investigation.

The degree of success with this type of strategy (moving from the inside of the possible conspiracy outwards), is a direct function of the ability of the investigator to: (1) marshall enough circumstantial evidence against a central participant (usually the owner or his partner) to convince one of them, in exchange for future consideration, to incriminate the others, or (2) utilize eyewitness or other solid information on the likely firesetter to catch that participant on an arson or other offense, and build the case against the other scheme participants with that other charge as the groundwork. This latter "torch centered" strategy appears to work most adequately in jurisdictions where torches work a limited geographic area, and thus their whereabouts on the night of the fire is more likely to be known by the neighbors or underworld associates of the torch. Where torches are more mobile citywide or jump from commercial to residential to industrial arsons, the task of building background intelligence on the likely torch in any single case is a much more difficult task for the investigator.

B. Starting at the Outer Limits, Working Toward the Center, or "Outside-Moving In"

The above "Starting at the Center, Working Out" type of strategy relies mainly on arson investigation, street intelligence, and traditional detective techniques. In contrast, the alternative approach of starting at the outer limits of an arson-fraud scheme's organization and working inward toward the central conspirators relies mainly on white-collar crime investigative techniques. That is because the individuals on the periphery of a scheme are most likely to be those who provided some type of financial expertise in arranging the insurance coverage, mortgage loan, or insurance settlement. Therefore, their technical knowledge is limited to one or more white-collar crime offenses—which may entail insurance fraud or another type of fraud depending upon the specific motive of those at the center of the conspiracy.

This strategic approach requires that the investigator undertake a thorough analysis of all individuals who had business dealings with the owner-insured, and thus who would likely have knowledge of a fraud transaction. Such individuals include the following, who are presented in terms of the relative distance from which they customarily interact with the owner-insured.

<table>
<thead>
<tr>
<th>Distance</th>
<th>Potential Roles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fairly Distant</td>
<td>Suppliers and vendors, who might have been bribed to produce wholly false or backdated receipts for merchandise, inventory, or raw materials claimed as destroyed in the fire.</td>
</tr>
<tr>
<td>Fairly Close</td>
<td>Insurance agent or broker; attorney (who may serve as financial advisor); or accountant.</td>
</tr>
<tr>
<td>Extremely Close</td>
<td>Public insurance adjuster, who could have worked with the suppliers, bookkeeper, and partner to prepare the false proof of loss form.</td>
</tr>
</tbody>
</table>

Partner, with whom the owner-insured probably shared information on financial problems and the pros and cons of arranging an arson.
Bookkeeper, who possibly made false bookkeeping entries to conceal payments to the torch and to inflate the business volume in the books.

In building a fraud or related type of case using this white-collar crime approach, the investigator should review each of the records, papers, and official documents which the respective specialist likely prepared himself, or had prepared by others, in an effort to see if additional questions arise from this examination. The initial review of the business books and records may indicate, for example, the presence of a questionable degree of financial stress, obscured by fraudulent entries in the business records, which an investigative accountant might pin down more precisely.

Successful prosecutions of multiple member arson-fraud schemes usually take the proof of loss form as the central or "bellwether" source document which notes the amount and the identification of items claimed. Building upon this as the foundation, investigators have been able to show that fraudulent receipts were generated by suppliers, perhaps at the request or direction of a corrupt public adjuster. Occasionally, the investigator is able to find that items for which receipts were generated actually were not even manufactured when the vendor states he delivered them to the insured. Thus, the vendor opens himself to a conspiracy, fraud, or perjury charge.

The development of a fraud case does not usually involve the identification of the torch until another participant, such as a public adjuster or owner-insured, is caught, having been implicated by someone else in the scheme. The investigator and prosecutors may endeavor to identify the torch and fire broker early on, but their secrecy and insulation of operation make their identification difficult. However, after an owner or fire broker is reasonably certain he will be convicted, he may divulge the identities of the remaining scheme participants and agree to testify against them.

This approach should never be advocated as a simple formula which is expected to work in all cases. Quite the contrary, investigators can cite examples of special fraud and racketeers bureaus which were developing a white-collar crime approach to a scheme, like the one above, only to stumble upon the torch in that case when he was caught in some unrelated crime by another law enforcement agency. Rather than try to advocate the superiority of one strategy over another, it is important to assess the relative strengths and weaknesses of the "inside-moving-out" and "outside-moving-in" approaches at the outset of an inquiry. This can be done by reviewing intelligence on the types of arson-fraud specialists operating in your jurisdiction, and the availability of investigative manpower to pursue both of these investigative approaches simultaneously. Clearly, in a jurisdiction where the majority of arson-frauds are committed by owners and torches aided by a few pigeons, the outside-moving-in approach will be more difficult to employ because of the fewer numbers of experienced white-collar criminals in such an area who generate the trails of fraudulent paper. In short, each strategy or mix of strategies should spring from the special combination of arson-fraud motives and specialists most readily identifiable in each jurisdiction.

C. Identifying Vulnerabilities of Scheme Participants

One reason investigators are reluctant to probe arson-fraud schemes is that they feel the schemers are true professionals who really know their line of work, while the investigator is rarely equipped to take on this kind of sophisticated white-collar or organized criminal. Actually, the air of professionalism and technical expertise which arson-fraud schemers assume is usually just that--an air designed to signal, more often to potential clients than investigators, a mood of competence, self-control, and cool behavior under fire. The investigator who automatically assumes that the fire broker, torch, or other scheme specialist is really as
self-assured as he appears is accepting the suspected schemer's side of things without questioning it. Experience with successful arson-fraud investigations suggests that the arson schemers have just as many insecurities over their crimes and about being caught as other criminals do, and that behind the cool exteriors they may present to the client or investigator, they are just as vulnerable as other criminals who eventually get caught.

1. Mistrust Between and Among Participants. A central ingredient in any investigative plan is the identification of legal and investigative vulnerabilities which will help build a case against that suspect, and then help cultivate him as a cooperative witness for the government. The general vulnerabilities of arson-fraud scheme participants have been discussed in Chapters 2 and 3. In trying to penetrate an arson-fraud conspiracy, it is important to keep in mind that this specialized field of criminal activity is composed of an odd assortment of criminals who often have little affection or use for one another, apart from the monetary gain involved. In fact, some fairly standard features of the interaction between and among various scheme participants can help the investigator determine whether one or more such suspects would be good subjects to cultivate as cooperative government witnesses. The following discussion covers some of the major sources of friction and animosity which an investigator will likely encounter in any scheme whose members exceed in numbers the owner and the torch.

- General rule: schemers closest to the source of the money cheat those furthest from it. The owner-insured and the white-collar crime specialists who assist him use to their advantage their access to the books, financial records, and privileged information on the insurance policies and coverage amounts. The first people they cheat are those who have no real idea of the business volume or amounts of coverage in force. They have an incentive to cheat the torch, who is paid a flat fee. The fee's relatively small size may be a function of their representation that the business is not doing well and the owner does not have a lot of coverage because of prior fires or credit problems.

- The main torch cheats assistant torches who may assist him. Why would a torch do such dishonest things? First, because he is paid a relatively small sum, and one of the few ways he can earn a little more is to tell an assistant (provided he uses one) that the "boss" (the owner) was very stingy. How can a torch get away with doing this? His assistant, like the torch himself, is probably more grateful for having that occasional employment than he is dissatisfied with the prevailing low wage.

- The torch cheats the owner. Because many torches double as burglars, they know how to move equipment and merchandise which they take from the premises before they burn it. While this is not actually cheating the owner out of money, the conspicuous absence of business machines or essential furniture can help investigators establish a fraud motive easier than would be the case otherwise. Thus, the torch's action can place an owner in jeopardy of intense investigation if investigators suspect the owner as the likely scheme culprit.

- The owner or fire broker balks on paying the torch. Where a building is only partially destroyed, or what was to be a "professional" torch job resulted in death or injury, the owner may renge in paying the balance owed to a torch for his services. It is not uncommon for an owner or fire broker--whoever personally deals with the torch--to contrive a reason to whittle down the payment balance in order to leave himself a greater share of the proceeds. While this may first appear to be cheating, perhaps it is better described as reneging, and may be based upon a prior verbal contract that full payment would ensue only if certain specified conditions were met. Nonetheless, the torch may feel that any unforeseen problems were not his fault, and he may demand the balance. If he does not get it, or extracts it after the owner or fire broker has humiliated him, the torch may walk away bearing very harsh feelings.

- The fence cheats the owner. The owner who wants to claim that his inventory and materials were destroyed in the fire can collect twice by selling them "out the back door" to a fence, usually for about twenty cents on the dollar. Actually, the fence knows that the goods are worth much more than that, but since the owner expects the insurance to pay for the value of that merchandise anyway, anything moved by the fence is just additional clear profit—even if the fence misrepresents what he expects to get for that merchandise.
The above represents some common frictions among participants which an investigator may expect to encounter in detailed investigations of arson and insurance fraud. Of course, many criminal relationships are more harmonious than others, but the prevailing condition in most organized rings of criminals is one of jealousy and mistrust that is only offset by the economic necessity of working together, if only for a brief time. Where the investigator can show the suspect that his vulnerability in a criminal investigation places him in obvious jeopardy, then the motive of economic gain may drop into the background. In this way, the investigator may well be in a position to develop a government witness. If the investigator can then demonstrate, persuasively if not conclusively, that there is an objective basis for that participant to believe that he was cheated or his skills taken for granted, then cooperation may be somewhat more forthcoming. Still, however, each situation must be approached separately.

2. Why Arson-Fraud Schemers Make Mistakes— and How to Capitalize on Them. In addition to scheme participants' vulnerabilities which result from their dishonesty with each other, there is another set of vulnerabilities which stems from the arson-fraud schemers' extreme over-confidence that they are the geniuses and investigators do not know what they are doing. Because arson-fraud scheme participants feel that they operate in a lucrative field which is noted for the absence of vigorous investigative attention, they frequently make mistakes which, in retrospect, a truly sophisticated criminal should not make. However, such behavior serves the interests of law enforcement and public safety, and it is important to review some of the more common mistakes which the owner-insured and other scheme participants frequently make.

The mistakes made by each type of arson-fraud specialist—whether a criminal or a legitimate businessman—grow out of their respective roles in each scheme. Fire brokers, real estate speculators involved in arson, and certain corrupt public adjusters commit errors which stem from their activities as entrepreneurs of illicit business activity. Here, the illicit activity involves selling a combined package of arson and insurance fraud. Like entrepreneurs in the world of legitimate business, arson entrepreneurs enter a brand new field of business opportunity, and in so doing they encounter tremendous risks—risks with regard to physical hazards of fire, to possible failure of the scheme, or to detection and prosecution. The arson entrepreneur acts to control or offset the risks inherent in his illicit activity in two ways: (1) by minimizing the risks by taking specific actions of self-protection, and (2) by maximizing his profits as the only real compensation he can extract for absorbing these high risks.

Arson-fraud entrepreneurs such as fire brokers or pigeons minimize the risks in their illicit business by secrecy of operation and by insulating themselves from those whose knowledge of their activities could be hazardous. Specific acts which arson entrepreneurs may take to improve secrecy include keeping one specialist (e.g., the torch) distant from other specialists (e.g., public adjuster, business partner, and the owner) in a scheme. Thus, if one is caught, the worst "damage" he may be able to do is to provide hearsay information on another. A second use of secrecy by the fire broker is to act behind the scenes by arranging for other participants, such as the public adjuster or owner, to prepare the fraudulent documents and sign them.

In order to compensate himself for the risks he takes, the arson-fraud entrepreneur tries to gouge the victim (here, the insurance company) out of as much money as possible. While greed obviously lies at the base of the entrepreneur's motive, the high risks he takes operate on his greed to magnify it still further. Because his greed often overtakes him, the arson entrepreneur loses some of his objectivity and exposes himself by making simple, unthinking mistakes which the watchful investigator may be able to detect—and exploit.
These mistakes manifest themselves in several ways. First, the worry and insecurity of the arson entrepreneur can force him to over-compensate, with a degree of egotistical arrogance that leads to boasting and even sloppy work. While torches must frequently advertise their skills by bragging, fire brokers seem to do so out of mixed feelings of arrogance and general contempt for law enforcement agencies and insurance companies, who could not be as smart as they are, or else they would have caught them by now. Thus, while the arson entrepreneur on the surface appears to be a shrewd and calculating illicit businessman, he is also subject to the same subjective emotions of greed and arrogance which beset, to some degree, all human beings. These impulses may prevail on just enough occasions to cause the arson entrepreneur to commit just enough mistakes that an investigator can pick up the trail and begin to build an investigation on them.

Examples of some of these mistakes include the entrepreneur's commitment to find all of the best specialists in each field of firesetting, real estate speculation, and insurance fraud, such that the entrepreneur leaves his own "signature" of professional arson and fraud. The signature may suggest that only a skilled professional could perform each of those tasks, and a master planner probably recruited the entire group. Other examples include an over-specialization with one type of clientele, such as restaurant owners, to the degree that many of the owners in that business in that city know by word-of-mouth of the entrepreneur's reputation and availability. This type of vulnerability enables the investigator to develop background information on that arson entrepreneur, his associates, and his legitimate business dealings, in the search for a pattern which may reveal some or all of the other specialists with whom that entrepreneur deals.

Another mistake which the entrepreneur makes is the increasing reliance on the same specialists, over and over, as they become more comfortable with each other. While the arson entrepreneur may have kept the specialists apart because of initial concern for secrecy and mutual distrust, he gradually comes to trust more and more of them. Original isolation of one from another breaks down, and each of the co-conspirators comes to know more and more about the others--often including first person knowledge of their illicit activities. Thus, the arson entrepreneur commits the common human error of being too trusting of someone who later may develop a motive to betray him.

A final mistake which the arson entrepreneur makes is to want to be the biggest and best fraud schemer around. While his greed and arrogance feed this objective, together they can cause the entrepreneur to want each scheme to be more elaborate and more profitable than the last. In furtherance of this objective, he begins to specialize and sub-specialize in the torches (and chemists and perhaps electricians) he may use. He can build a ring of so many specialists that his failure to integrate and manage all of them as a "team" rubs one or another of them the wrong way. Like many self-made wealthy entrepreneurs, arson-fraud schemers often do all of the talking and too little listening to their associates, which can further strain loyalties and relationships. This situation also deters anyone from performing a critical, objective review of the arson entrepreneur's plans and actions. Thus, the arson entrepreneur--whether fire broker, corrupt public adjuster, or real estate speculator--exposes his weaknesses and mistakes to an ever widening circle of co-conspirators and sometimes casual associates, who may have an incentive--sooner or later--to do him in or get even. The investigator who realizes the likelihood that arson entrepreneurs create these "self-destruct" mechanisms is in a good position to cultivate informants--and potential witnesses.

Some of the other common mistakes in strategy and judgement which arson schemers of all types make are discussed below.
• **No insurable interest.** The term "insurable interest" has two meanings: first, that the property at issue is worthless, and thus, no policyholder could have a monetary interest in something that has no value. The second (and more common) meaning refers to the ownership or financial interest role of the policyholder. If he owns the property, or has an interest of record in it, then he has an insurable interest. Occasionally an investigator will come across a suspicious claim, only to find that the person filing the claim—who holds the policy on the premises—has no financial interest in it. Whatever this says about the company which issued that policy, that claimant has opened himself to an investigation for fraud.

• **Multiple claims arising from the same fire.** Some schemers have been known to take out more than one fire insurance policy on the same premises, and when the fire occurs, they file claims with all those insurers. Normally, they state falsely that the claim being submitted is the only one arising from that fire—a statement which is untrue. The Property Insurance Loss Register (PILR), and the Insurance Crime Prevention Institute (ICPI) discussed in the Chapter on "National Resources," can help spot such multiple claims.

• **Business books and records are "too perfect to be real."** Owners who involve bookkeepers or accountants in an arson-fraud scheme have been known to create a separate set of books in order to give the appearance of a higher volume of business than that which existed, in order to effect greater insurance payment. Books fabricated in this way are often spotted because they are devoid of the most minor harmless errors. Often, however, an experienced investigative accountant may be needed to establish the fraudulent nature of such books or individual entries.

• **Internal resentment by partner or employees.** Whether out of panic or greed, business owners have been known to alienate their partners and employees with the decision to arrange an arson. It may be a case of the partner feeling that the owner gave up too soon, or never gave him a chance to straighten out the business' financial affairs. For whatever reason, the animosity thus created can take a long time to fade. While the owner may be able to take the insurance settlement and skip to a new business venture, it may be more difficult for a partner, bookkeeper, or other employee to do the same.

• **Tax evasion.** While this angle is rarely explored, it does hold potential in real estate arson scams. Where properties are bought and sold merely to increase their paper value, transactions are often consummated with a small fraction of cash down and a tremendous mortgage. Like everyone who pays mortgage interest, those speculators are entitled to take the interest deduction only if they actually pay the interest. Where the transactions are but sham transactions designed to inflate the paper value of the properties, the owners may never make installment payments; hence, they are not entitled to the interest deduction which they may claim. If they claim the deduction when they do not pay the interest, they are ripe candidates for a tax evasion investigation.
I. Alternative Criminal Charges

Often in arson-for-profit investigations, investigators are unable to show the incendiary cause of a fire or, if able to prove such cause, are unable to tie the owner to the fire either through motive or opportunity evidence. Developments such as these often become obstacles to investigators in continuing to search for additional evidence, or to prosecutors who do not see the value in proceeding when the corpus of an arson or insurance fraud case cannot be clearly shown. The purpose of this section is to convince the investigator that some options do remain open and active if severe problems with an arson or insurance fraud case are encountered. While the following discussion is not intended to give the impression that there is always an effective alternative, the point is that alternatives should at least be sought after and assessed to see if they can be used to salvage the investigators’ efforts.

A. Perjury Charges and the Arson/Fraud Investigation

Participants in arson-for-profit schemes (whether owners, torches, or experienced white-collar criminals) usually operate from the assumption that their skillful planning and secrecy of operation will protect them from detection and vigorous investigation. Therefore, they can be expected to provide false and misleading information to investigators on an almost routine basis. This includes field interviews, as well as grand jury testimony. Accordingly, a number of laws governing perjury and false declarations made to investigators may be employed to penalize such illegal behavior.

Perjury and related laws are not commonly used by arson or white-collar crime investigators because the normal objective of the investigation is to get to the heart of the arson or fraud. However, investigators should always be mindful of the
necessity to insure that the progress of an investigation is not impeded by false information designed to frustrate or deceive investigators and prevent successful completion of the case. The filing of perjury or related false declaration charges can, under appropriate circumstances and where the evidence warrants, demonstrate that investigators and prosecutors are serious about maintaining the integrity of the investigative and grand jury processes.

Perjury laws can be employed in a number of circumstances in arson-for-profit investigations. The following are some examples:

- **In undercover investigations,** where law enforcement personnel or government informants become parties to conversations regarding arson and related fraud racketeering. If the undercover personnel or cooperating informant is outfitted with an electronic transmitter or recording device, scheme participants can later be queried under oath about their incriminating statements.*

- **Arson-fraud schemers,** usually at the "outer fringes" of arson rings, may be persuaded in the face of a perjury charge to cooperate with authorities in the identification and incrimination of other participants. Types of individuals who may on occasion be co-conspirators in arson schemes, but not as centrally involved as a fire broker or client, include a business partner, bookkeeper, insurance agent, bank loan officer, or realtor. [People v. Spomer (Denver, CO, 1978).]**

*Laikin was later reversed on appeal because certain questions he was asked before the grand jury did not directly correspond to the conversation he had had with the government informant. Proper preparation during the investigative and grand jury stages should enable investigators to avoid this type of problem. U.S. v. Laikin, 583 F. 2d 968 (1978).

**Spomer was an owner whose business burned in an arson fire. He denied under oath that he had sought to increase the insurance on his business just prior to the fire, and was indicted and convicted of perjury.

B. False Statement Statutes and Ancillary Fraud Schemes

The insurance fraud which accompanies a professional arson may be only one of several lucrative frauds designed by the schemers. In a growing number of cases, the arson-insurance fraud combination is really only one component of a larger criminal scheme to defraud banks, business suppliers, and even federal grant and loan programs. In order to extract as much money as possible from each of these fraud scheme components, the perpetrators will falsify many types of applications, reports, filings, receipts, and other documents. While state and federal violations which grow out of these actions usually are not the focus of law enforcement attention, it may be possible to win the cooperation of one or more principals in an arson scheme by first making a false statement or related type of case. The following discussion is intended to show what documents are most likely to come into play in a bank loan-arson-fraud scheme, and the legal remedies available for this activity.

In order to obtain a mortgage or other type of loan from a bank, savings and loan, or credit union institution, the applicant may intentionally provide false information on the loan application and statement of assets forms. A common example is the misstatement of the financial condition of the applicant and his or her business. Where false statements are submitted to a federally chartered or insured financial institution (including state-chartered institutions which obtain FDIC and other federal insurance), the applicant may have committed a violation of a false statement statute, 18 U.S.C. § 1014. There are usually parallel state laws which cover this type of violation. (In order to determine whether a financial statement contains fraudulent information, see Loretta Campbell, Target Co., Inc., Balance Sheet, in this manual.) Individuals participating in an arson-for-profit scheme who might be a party to a false statement violation include the owner/insured, bookkeeper, accountant, and/or
owner's attorney. The bank loan officer might also be a party to the violation.

C. Fraud Involving Federal Grant and Loan Programs

Arson-for-profit schemers have been known to obtain a variety of federal loans and loan insurance and then to abscond with the funds when the buildings later burn, presumably for the insurance money. Arson-for-profit schemers involved in this pattern of activity might be a real estate speculator or a contractor who became familiar with the ways in which federal programs work. Inner-city multi-residential housing seems to be the subject of this type of activity most often, and the types of federal Housing and Urban Development (HUD) programs involved include:

- Insurance for home improvement loans in urban renewal areas.
- Loans or loan insurance to convert apartments into condominiums or cooperative housing.
- FHA insurance on loans to rehabilitate deteriorating housing.

Where speculators or individual owners have defrauded HUD in the above types of programs, their typical schemes can involve:

- Arranging for a loan applicant to falsely certify that he or she resides in a particular dwelling, when they do not; or providing false employment verification so the applicant would qualify for the benefit.
- Providing false receipts for materials and labor allegedly used to rehabilitate a housing unit, when in fact either no such work was done, or cheaper substandard materials, and less labor, were used.
- Arranging for an applicant to falsely state that he or she owns the housing unit in question, when they do not.

The above types of fraud usually involve violation of 18 U.S.C. § 1010, submitting a false statement regarding a HUD loan or loan insurance application. The variety of ways to defraud federal insurance and loan programs seems to be limited

only by the imagination of the schemers. For example, investigators should be aware that Small Business Administration (SBA) loan programs offer a source of money that may be attractive to certain arson-for-profit schemers. In order to obtain more information on the specifics of each HUD or SBA program in question, investigators should contact the nearest representative of the Office of Inspector General of that agency. Also, investigators might find the book Programs of HUD informative. It is available from the Office of Public Affairs, Department of HUD, Room 9245, Washington, D.C. 20410, and from many HUD Regional Offices.

II. Administrative and Civil Remedies

A major objective in controlling economic arson is the prevention of future acts of arson, as well as punishment for past ones. Professional arsonists can be deterred by the likelihood of prosecution and imprisonment, but it must also be remembered that they commit their acts not out of rage or other irrational emotion, but out of selfish, economic interest. A wide range of remedies--civil as well as criminal actions--may deter them if the remedies are invoked with careful planning, and frequently enough to create the perception in the mind of an arsonist that his profit will be reduced or eliminated. There is also monetary benefit to local jurisdictions which mount civil remedy programs. They can recoup lost tax revenues and demolition costs, and these can at least partly offset the tremendous costs of suppressing arson fires, as well as the serious loss of real estate tax monies. Therefore, any agency or unit concerned with arson-for-profit should consider the combined fire prevention and profit-reducing aspects of civil suits and administrative actions, and their tax-producing benefits as well.

A. Administrative Actions

1. Code Enforcement. There has been a recent flurry of interest in using municipal building code and related
enforcement powers to prevent arson. This approach is believed to be valuable where authorities suspect an economic motive on the part of the owner or occupant. However, recent experience with this strategy suggests that it should be approached with extreme caution. The reason is that the owner who maintains a substandard building may be doing so as a reaction to his own poor business or personal condition. Therefore, official efforts to enforce building, sanitary, and other codes can create additional financial costs (both repairs and violation fines) that together become an enormous burden. As a consequence, this well-intentioned effort can contribute, unintentionally, to an increase in arson although officials expected the opposite result.

One approach to code enforcement which may not worsen the owner's financial stress is being undertaken by the New York City Mayor's Arson Strike Force. There, a special detachment of city fire marshals is implementing a Landlord Contact Program which entails visits to landlords with prior histories of arson fires and whose buildings demonstrate indication of potential fire problems, on the basis of a computer-assisted study. The fire marshals will notify the landlords of the results of site visits to the buildings in question, and of the options open to the city if serious code violations are not corrected. In an effort to assist those landlords who indicate a good faith intention to repair their buildings, the fire marshals will provide the landlords with a specially prepared guide of federal and state housing subsidy and grant programs which may offset, or defer, the costs of making the necessary repairs. Further, the Landlord Contact Program will provide special staff assistance in helping the landlords who intend to follow through with the application and other bureaucratic requirements involved in obtaining grants and loans. A similar type of program is being implemented in the city of New Haven, Connecticut, which has hired a special Housing Counselor. Both efforts are being supported by grants from the Aetna Life and Casualty Company of Hartford, Connecticut.
Premises inspections and administrative searches may be conducted for a variety of reasons in order to prevent arson, but the most common is to place the owner or occupant on notice that the premises is considered at hazard. Therefore, it is being inspected to determine whether burglar and fire alarms, sprinkler, and other safety systems are fully operative. While investigators normally do not advise the owner (or occupant) that the premises is viewed as being at hazard because of his or her suspected arson-prone behavior, they may notify the owner that the building will be kept under surveillance in order to avoid the possibility that anyone with an arson motive (e.g., vandals, blackmailers, or pyromaniacs) could set a fire without being spotted. Investigators believe that the force of their notifications, coupled with the rigorous inspection of fire prevention systems, will combine to deter someone who is thinking about arson from actually committing the act—or having it committed. While this approach to arson prevention has not been studied for its effectiveness, it is becoming more widespread in localities which can deploy fire service and police manpower for arson prevention. Wherever such an inspection and owner notification program is undertaken, it should be done with full consideration given to legal and constitutional requirements which govern this form of exercise of municipal police powers.

3. Demolition. Condemnation and destruction of fire-prone buildings are viewed as solutions usually in the case of old, decaying properties. While the administrative and legal actions necessary to effect demolition are costly, this approach does remove a major target of incendiary fires. One advantage to undertaking a demolition strategy is that it can spur the local authorities to gather information on the current market value and, therefore, the insurable interest in the buildings. Where the insurable interest is minimal or non-existent (due to an advanced state of deterioration), such documentation may be helpful in reducing insurance coverage on the buildings. Information on the absence of an insurable interest can also be utilized by an insurance company to deny payment after a fire, if it is not possible to prevent the fire through timely demolition.

For further information on a municipal demolition program designed in part to combat arson-for-profit:

Fire Investigation Unit
Phoenix Fire Department
620 W. Washington Street
Phoenix, AZ 85003
(602) 262-6297

B. Civil Suits and Liens

As noted above, the value of civil suits to deter arson-for-profit is a function of the economic motives of the culprits. All professional arsonists incur expenses in having fires set intentionally and having insurance documents falsified. One reason insurance coverage on burned properties is raised to such inflated levels before the fire is to guarantee the arson schemers a substantial profit after the torch and other criminals take their fee or percentage. If the profit from the insurance fraud could be reduced, the incentive to commit professional arson would diminish. In that regard, one set of solutions involves civil actions to obtain funds from the insurance proceeds in order to eliminate the enormous profit in professional arson.

1. Suits and Liens to Recover Back Taxes and Other Expenses. In a growing number of states, laws have been passed which allow municipalities to file liens to obtain back real estate taxes from fire insurance payments. Such legislation has several objectives, in addition to reducing the profit motive for arson. One goal is to obtain tax revenue which is lost when the destroyed building is removed from the tax rolls. Efforts to obtain fire insurance proceeds have been credited in a number of localities (e.g., Buffalo and Rochester, New York) with helping to reduce arson-for-profit and with partially offsetting real estate tax losses.
Related actions, which can also reduce the arson profit margin, include suits to recover demolition costs and building and code violation fines. While experience to date with this entire set of civil remedies is limited, its advocates feel that it can be an extremely valuable tool. However, one drawback was written into the legislation of several states, and it places the municipal plaintiffs in line for the insurance proceeds after the mortgagees. Often, only limited funds remain after all mortgagees have been satisfied. Therefore, movements are underway in several states to revise these laws and to place the municipality first, rather than last, in line for its share of the insurance proceeds. For an overview of one state's experience with these civil actions see the article, "New York's Attack on Arson for Profit," which is reprinted at the end of this section.

2. Civil Anti-Racketeering Suits. A 1970 federal law enables those who have been victimized in their persons or property by certain types of racketeering activity to sue the perpetrators for treble damages plus reasonable attorneys' fees. This provision, 18 U.S.C. § 1964(c), of the Racketeer Influenced and Corrupt Organizations (RICO) law, has been viewed as permitting people, as well as other entities which hold title to property, to sue racketeers. One provision of the RICO law (§ 1964(c)) makes it easier for a victim to sue someone convicted of a federal RICO violation, but the federal law does not require a prior federal conviction for a RICO offense in order to file a civil suit. Entities which may be entitled to sue the perpetrators of a pattern of professional arson activity involving mail fraud and other forms of racketeering (including extortion), include:

- Insurance companies;
- Municipal and other taxing and service-providing authorities; and/or
- Tenants or other occupants of buildings destroyed or damaged by arson.

A review of a number of recently filed, but still pending, civil RICO suits provides an indication of the presumed coverage of this civil provision to arson-for-profit racketeering:

- **City of Milwaukee v. Hansen (E.D. Wis., Civil Action No. 77-C-246, 1977).**
  In this action, the city of Milwaukee sued a father-and-son team convicted earlier of federal RICO offenses for three times the cost of extinguishing the arson fires. The treble damage tab totaled $577,000 in this case.

  An owner of a tavern in Pierce County, Washington, sued the former sheriff and 15 others, including several individuals previously convicted of RICO offenses, for having conspired to act under color of law, first to harass patrons and later to destroy their tavern by fire and drive them out of business. This action was brought under provisions of the federal Civil Rights laws, 42 U.S.C. §§ 1983 and 1985, and § 1964(c) of the RICO law.

  This suit was brought by Consumers Insurance Company following the federal conviction of Carbone and several others in the arson racketeering case in Pierce County, Washington, noted above in Anderson. In this matter, Consumers Insurance filed suit to seek forfeiture of $67,000 in insurance settlements involving two of the racketeering ring's fires. Consumers Insurance provided coverage for two taverns which were damaged, allegedly by the Carbone group in its effort to obtain control over the tavern business in Pierce County. 18 U.S.C. § 1963(c) of the federal RICO law provides for forfeiture of illegally obtained funds or property, under certain requisite conditions set forth in the law.

For further information on the civil provision of the RICO law, as well as other civil anti-racketeering remedies, see the following:


New York's Attack on Arson for Profit

Arson is increasing in New York City and many other metropolitan cities as well. Fire officials estimate that 25 to 40 percent of all building fires in New York are now intentionally set. Most recently, the increase has greatly accelerated. John T. O'Hagan, New York's Fire Commissioner, indicated that in the first six months of 1977, there were 3,700 arson cases—a 10 percent increase over 1976, a year which had represented a 10 percent increase over 1975. In the South Bronx, 30,000 buildings have been destroyed by fire in the past decade. Nationwide, experts estimate the arson rate has tripled in the last fifteen years. A thousand people die and 10,000 are injured each year by fires deliberately set, while $2 billion in property is destroyed.

Arson's Status in the Hierarchy of Crimes

Arson is, of course, a criminal act. One would assume, therefore, that one appropriate response to the problem would be improved law enforcement and stricter criminal laws. There's certainly room for improvement here. Insurance industry groups suggest, as a starter, that the FBI reclassify arson as a "Part I" crime, its most serious category, for purposes of crime statistics. It is currently classified as a "Part II" crime, along with drunkenness and loitering. Precinct politics being what they are, police departments tend to measure their success at fighting crime by how far they reduce the incidence of "major crimes" as they occur in FBI statistics. A change in classification might, therefore, lead to the police taking the crime more seriously and producing greater efforts at controlling it.

Increased cooperation between police and fire departments, as well as disclosure laws which will allow investigators access to insurance claim files might help, too. Still, the current conviction rate for arsonists is 1 percent, lower than for any other crime. Exclus-
The New York Response: Minimize Profit

In recent years, law enforcement officials have suggested that organized crime could more effectively be fought by innovative civil law strategies which remove the profit incentive that by increased criminal law actions.

New York's statute works on this premise in dealing with arson. An amendment to the state's general municipal law affords each taxing district in the state the option to make claims against the proceeds of fire insurance policies for any unpaid taxes, assessments, or other municipal charges which were liens against the realty itself.

Under the provision, each locality can decide whether it wishes to enjoy the benefits conferred by the statute. If so, the local legislative body has to adopt a resolution to that effect. (Although there does not seem to be any reason why every municipality in the state would not want to opt in, nevertheless the way remains open for those which do not perceive a serious arson problem in their communities to ignore this legislation.)

The building is likely to have numerous building-code violations and liens for unpaid taxes. The premise then rapidly changes down. The property owner collectively will attempt to deal with the problem.

To be sure, many fires are set for revenge, or through disinterested vandalism, some even for motives of welfare fraud. Yet, insurance experts are convinced that profit is more and more a factor in the dramatic increase in arson. They estimate that 40 to 50 percent of the money they pay out for fire claims go to arsonists and that half of the home insurance premium increase since 1968 has gone to cover the costs of arson.

Not all for-profit arsons are committed by financially pressed property owners who see it as the only way out from under. More and more, arson is becoming a business in which buildings are bought in a deteriorating urban area at bargain-basement rates. The fine points in the New York Law.

Once the insurer discovers that a community in which the covered premise is located is in the index, it cannot pay out any proceeds on its policy for fire damage until further action in accordance with the act. First, the insurer must notify the local tax collector of a claim on the policy and request a certificate indicating the amount of all unpaid liens against the property. Then the insurer is to do if it suspects that there is any evidence of arson in the index, contains the name of each insurance company, in the index to be maintained by the superintendent. The index contains the name of each taxing district electing to participate in the statute's benefits.

The Fine Points in the New York Law

A couple of things should be noted here. First, the statute gives the locality not only a "claim" intention in an index to be maintained by the superintendent. The index contains the name of each taxing district electing to participate in the statute's benefits. Notices placed in the index take effect thirty days after their entry therein. Their existence in the index constitutes constructive notice to all insurers that those taxing districts intend to assert claims against insurance proceeds for unpaid taxes and charges. The burden, therefore, is on the insurance carriers to search the index before paying out claims in a given company.

The act, which also amends the state's insurance laws, provides that the insurance superintendent then enters the locality's notice of
must provide that the payment by
the insurer of any liens claimed
in timely fashion after receiving
the tax collector's certificate oper­
taxes not actu­
ally due and owing. In such a
case, the insured's only recourse
would be to proceed against the
taxing authority.
Finally, one interesting thing
about the statute should be noted.
The act provides that the locality's
resolution of intention to claim
against proceeds is not effective
unless it first passes a local law
"providing for the release or re­
turn to the insured of any
amounts to which it would other­
wise be entitled to claim provided
that the insured agrees with the
tax district in writing to restore
the affected premises to the same
or improved condition that it was
in prior to the time that the
liens of such district against proceeds
provided for in this section arose,
subject to such conditions as such
resolution shall provide to guar­
antee performance of such obliga­
tions."
In other words, the property
owner may opt to use the pro­
cceeds of the policy to rebuild the
premises. In such case, the munic­
ipality could return the proceeds
to him, possibly requiring him to
post a performance bond to ensure
reconstruction. This has the effect
of encouraging serious property
owners who want to remain in the
community to stay there. It also
helps assure the municipality that
a building, a source of future tax
revenues, will go up in place of
the ashes there now. Undoubted­
ly, most cities
would prefer to
have a ratable income-producing
property in the neighborhood than
to collect a one-shot insurance
proceeds check on a vacant lot.

CHAPTER 7: COOPERATION AND COORDINATION

Introduction

The complexity of citywide arson-for-profit problems
requires investigators to obtain frequent and varied forms of
assistance wherever possible. This chapter covers the
principal sources of cooperation between and among criminal
investigators and those who have a considerable stake in
reducing arson-fraud in a community.

These sources are:
• Insurance companies
• Media
• Neighborhood organizations
• Other law enforcement agencies

I. Insurance Companies

Any approach to improving cooperation between a criminal
investigator and an insurance company soon turns to a
discussion of insurance actions to deny payment of fraudulent
claims. In considering the full range of weapons which can be
enlisted to control arson-fraud, it is obvious that the
probability of criminal conviction and incarceration are
important deterrents. However, the experience even in
jurisdictions with active arson control programs suggests that
the volume of quality criminal cases will always be limited
because of the evidentiary requirements in large scale,
conspiracy prosecutions. A look at the real motivations behind
most economic arson reveals that the overwhelming objective is
to obtain the insurance proceeds. Theoretically, any effort
which could be mounted to curtail payment of insurance proceeds
to owners who set or arrange fires would, therefore, be a
tremendous deterrent. In reality, however, the potential of
this deterrent has never been fully tested because there are
great pressures and constraints which insurance companies face
when they consider, on a case-by-case basis, the option of
denying payment on a suspicious claim. First, in a
surprisingly large number of states, insurance companies open themselves up to civil suits for unfair claims practices when denying payment. Second, they run the continued risk of appearing to be "anti-consumer" as their strategy to deny fraudulent claims begins to attract widespread attention. Unless there is a concerted industry-wide insurance effort to combat arson-fraud, the companies that take the initiative by denying large numbers of fraudulent claims could lose a great deal in terms of damages arising from court judgments in favor of policyholders, loss of public confidence, and loss of policyholders who shift to more "pro-consumer" companies. Thus, there are some unfortunate features which can weigh against more vigorous self-policing by insurance companies in the fight against arson-fraud. Even so, a number of national companies have increasingly expressed a heightened willingness to challenge suspicious claims and cooperate in a variety of supportive ways with law enforcement agencies. Aetna, Allstate, State Farm, Factory Mutual, and Safeco have developed national reputations for such cooperation and support.

To a large extent the ability of a law enforcement agency to influence the actions of an insurance company in any single instance is limited. However, there are a number of steps that an investigator can take to assist an insurance company which may be considering the option of denying payment of a claim. One of the first steps is to advise the company claims executive or legal counsel of that law enforcement agency's access to evidence, which may be more useful in a civil rather than a criminal case. While such communications are sensitive and are usually governed by strict state and federal privacy laws, it may be possible for a law enforcement agency to notify an insurance company that a case (i.e., one arising from a fire at a particular location on a specific date) is being closed out without prosecution because the evidence does not constitute proof beyond a reasonable doubt. That evidence might well meet a lesser standard: a fair preponderance of the evidence—the standard in a civil proceeding. In this way, a prosecutor's office may be able to signal the insurance company of its possession of valuable evidence, the latter may be able to obtain through subpoena or formal request depending upon state law governing communication of insurance information and immunity conferred upon insurance companies and/or law enforcement agencies.

An investigator may come across many types of information which could be useful to an insurer in defeating a fraudulent claim. Normally, reasons for rapid payment of a suspicious insurance claim emanate from inconclusive evidence at the fire scene or pressure from the insured's public adjuster. However, it is not uncommon to find an owner who falsified information on an application for original insurance coverage, or who increased the limits of coverage after obtaining insurance. In such circumstances, the false information may be further evidence of insurance fraud. Taken alone, a material misrepresentation on the application form may also be grounds for the insurer either to deny payment on a claim or to sue for return of the amount it has already paid. Where the remedy at hand is a civil action, the investigator may want to review a recent article on this subject: "Misrepresentations and Nondisclosure in the Insurance Application," 13 Georgia Law Review 3 (1979).

Another step a law enforcement agency might take is to press the case with an investigative association that operates on behalf of one or more insurance companies. The most well-known national organization is the Insurance Crime Prevention Institute (ICPI), which is profiled in the Chapter on "National Organizations" later in Part I of the Manual. ICPI is atypical of most insurance approaches to combating arson, for it develops cases for criminal rather than civil prosecution. ICPI agents have access to information on policyholders from participating companies and may be able to assist the criminal investigator both in gaining access to
such information and in analyzing it once it is obtained. Other insurance associations and investigating arms such as the General Adjustment Bureau (GAB) in New York, the Property Loss Research Bureau (PLRB) in Chicago, or First Security Services in Boston focus on either fire cause determination or investigation for civil fraud defenses. The criminal investigator should explore these, as well as any other conceivable option, in order to put to productive use the evidence his agency has gathered but cannot use on its own.

A frequent reason given for the less than harmonious relations between a particular insurance company and law enforcement investigators is the difficulty in dealing with one or another of the company’s claims agents or supervisors. Where such problems cannot be worked out at the first line supervisory level, an agency that has a considerable stake in improved relations with that company or in a particular investigation involving it can pursue the matter with a number of higher level officials in that company, starting with the district and then regional claims manager and moving finally to the headquarters-level chief of claims and legal counsel positions. It is also especially important for a law enforcement agency to advise an insurance company—discreetly but explicitly—whenever it feels that an insurance or claims agent is demonstrating little or no interest in a possibly fraudulent claim, or may possibly have been compromised in that instance.

II. The Media: The Role of Investigative Reporting

At first glance, it seems difficult to suggest any appropriate steps that investigators can take to cooperate with the media that would not create ethical problems, as well as serious legal ones. In most cities where local authorities have mounted campaigns to combat arson-fraud, the investigators have been far ahead of both the police and fire beat, as well as investigative reporters. Investigator initiation of contact with reporters in order to generate coverage of the arson-for-profit problem seems improper under nearly all circumstances. However, if reporters seek to develop an article or series of articles on the local arson-for-profit problem and if they subsequently approach the investigator, there are a number of steps the investigator can take without compromising either his impartiality or the rights of a suspect or accused.

First, the investigator can point out the wealth of public sources (including news clips of earlier arson coverage) that provide information on ownership, financial trouble, and even prior criminal involvement (e.g., coverage of trials). Many times the public records of prior fires, owner bankruptcies, and housing code violations of a particular property can point to the existence of an arson problem. By identifying such sources, the investigator is only pointing the reporter toward public repositories of information. The reporter may end up making a judgment or inference on the existence of a widespread problem, its relationship to housing and general fire protection issues, or any number of other policy matters that have no bearing on the guilt or innocence of an individual. If the reporter ends up with a story pointing to a number of suspicious fires "suffered" by a particular landlord, restaurant owner, or land trust, that would be an inference he arrived at independently of anything the investigator told him.

Conversely, there are a number of excellent investigative approaches that law enforcement personnel can learn from investigative reporters. Because members of that specialized journalistic discipline are largely dependent on public record sources of information, they can become highly skilled at the exhaustive analysis of such sources—even more skilled than the investigator who is just beginning to enter the field of white-collar crime investigation. Many of the most effective techniques are discussed in publications and newsletters issued by the Investigative Reporters and Editors (IRE) association, located at the University of Missouri, School of Journalism,
Investigators might inquire about the availability of IRE publications on tracking public records, interviewing sources, and a variety of other useful topics in white-collar crime and corruption inquiries.

III. Neighborhood Associations: Victims as Activists

Where arson-for-profit in a community is due in part to residential fires, the increased militancy of tenants and neighborhood associations of homeowners can be a disguised blessing for law enforcement agencies. While the strident posture of leaders of such groups may indicate a hostile attitude toward law enforcement, such communications normally stem from intense fear and despair. The investigator usually can point to one or more serious injuries or fatalities among residents in neighborhoods where such attitudes prevail. The constant anxiety that the next set fire might claim a friend or loved one is a serious personal matter for those neighbors, friends, and relatives.

In communities across the nation where investigators have expressed concern for an arson problem they have been able to turn community sentiments around in highly positive directions. In particular, the residents can become the "eyes and ears" constantly looking, and even patrolling, for someone preparing to set a fire or stripping a building to set it later. Residents can also be persuaded, through prolonged interactions with investigators who demonstrate their concern, to come forward with whatever information they may have associated with prior fires. That information ranges from rough hearsay on perceived conspiracies between landlords and Mafia racketeers, to eyewitness accounts of people and their movements at the fire scene on the night of a fire. In addition neighborhood residents, and especially those in apartment dwellings, pick up a great deal of information on the real owner of a building who is hiding (on paper) behind a straw. On occasion residents may see the owner checking the premises and talking about "my building," or they may be able to identify painters and handymen who work for that owner and would even admit to it.

One of the greatest services neighborhood associations can perform is to use their vast quantities of volunteer help to perform elaborate, in-depth research on building and ownership histories in a community. Frequently, a ten year building history of ownership, financing, code violations, and tax payments and liens can take one half day per building. In a neighborhood experiencing a wave of residential arson, the neighborhood association may be the only group in a community with enough manpower to perform such analyses. If the researchers are properly guided, the results can determine patterns of suspicious financial transactions and arson fires that might focus on a group of owners, speculators, and various other specialists. Moreover, the increasing contact that neighborhood associations across the country are having with experienced anti-arson community groups in Boston and New Haven is bringing about an exchange of vital expertise in arson pattern analysis. That exchange can be very helpful to investigators if they merely indicate a sincere willingness to work with and keep in touch with such citizen activist groups. While the militancy of such groups seems to create problems for continued communication with investigators, who are powerless to produce "results" as fast as neighborhood leaders demand them, it must be remembered that the arson-fraud patterns that such groups expose and document are often the results of decades of neglect of those neighborhoods by housing, code enforcement, and other local authorities. The residents are complaining about a "system" which has, for whatever reason, endangered their lives and property, and in general they only seek to redress that serious condition.

IV. Other Law Enforcement Agencies: The Role of Task Forces

Most of the recent advances in combatting arson-fraud schemes, whether organized or unorganized, have resulted from
the work of interdisciplinary task forces. Such task forces range from those directed by prosecutors who, as the task force chiefs, supervise the work of fire service and police investigators, to other task forces run by fire investigators and including a minimal complement of police investigators. Arson Task Forces established by the Bureau of Alcohol, Tobacco, and Firearms are credited with innovative use of federal laws covering mail fraud and explosive violations in arson-fraud investigation. Since the variety of task force staffing and supervisory arrangements does vary considerably, it is impossible to prescribe in all cases the exact cooperative relationship that one law enforcement agency concerned with arson should have with another. On the contrary, successes with major investigations come as frequently in the case of task forces run by fire service personnel as in other arrangements run by local prosecutors or federal ATF agents. What is important to understand at the very outset is the necessity of building in the key features found in successful task forces in some way in each jurisdiction that is serious about investigative cooperation:

- **A mix of specialized skills.** Fire cause and origin, arson investigation, accounting, white-collar and organized crime investigation, are all key specialized skills that investigators should possess. Whatever agency personnel with these skills come from is less important than the access to these skills when they are needed.

- **Access to prosecutor.** Task forces run by prosecutors are an extreme example of the point that early and continuing participation by an attorney can be of tremendous benefit to investigations. Questions ranging from Tyler warrants to expanded dropping affidavits, to the use of an investigative grand jury and witness immunity powers stem from both access to and good working relationships with prosecutors.

- **Availability of (or Proximity to) Special Assistance.** An enforcement unit is more likely to employ the full range of preventive, investigative, and prosecutorial options (including civil remedies) if specialists with backgrounds in applying those remedies are housed within or readily accessible to such units.

One advantage of including members of other disciplines within an enforcement unit or task force is the ability to call on a particular specialist (e.g., a police intelligence officer) to use his familiarity with similar specialists in his parent agency to conduct searches for information. Where a unit or task force commander may receive pro forma expressions of cooperation if he were to make the same request to another agency, the specialist within his task force can take advantage of a prior working relationship to expand the breadth and depth of any information search, background check, or surveillance requested.

More important than the formal structure of an arson unit or task force is the climate of cooperation within which it is created and the way its mission is determined and communicated to other key agencies with which it will deal. For example, in a task force where a fire service commander wants a detachment of particular police investigators rather than "any two" that police headquarters may assign, he must plan in order to bring about the desired assignment of those officers, who can be expected to be in equally great demand in their own agency. By assuring the police department that the detectives will receive credit for the police contribution to the task force in general, and to each arrest in particular, the police commanders may find that the gain of appropriate credit for their contribution actually offsets the temporary loss of the two police detectives.

If a book were written about failures of interagency law enforcement efforts, it would be a long one with each account strikingly similar to the others. Whether the issue is metropolitan narcotics units or countywide arson task forces, these cooperative efforts often are assembled quickly because of political and media pressures. The "corners" in human and public relations that are cut in order to grab quick results
can undermine the growth of a healthy spirit of cooperation. The most important single action in forming an interdisciplinary task force is the development of a clear mission statement, followed by protocols for the interaction of the task force with other law enforcement and private agencies in that locality.

The second critical step is for the task force commander to determine how he will recruit or otherwise obtain the necessary specialized expertise to handle investigations of complex arson-fraud cases. Where and how will he train his personnel? Where can he obtain accountants, or such short-term specialized assistance when he needs it? These and other questions arise constantly, and the degree of overall success of any one task force or arson unit is a measure of the ingenuity with which these questions of specialized expertise are answered.

A review of arson task force organization and operation throughout the country suggests that other agencies interested in developing such activities can learn a great deal from these efforts. For example:

- **Special Resources.** Two specialists that task forces frequently hire in-house are intelligence analysts (often civilians) and accountants. A few maintain technical specialists such as polygraph examiners and electronic surveillance experts. Some maintain videotape operators or research specialists to analyze property records and patterns of arson. These latter specialists often double as liaisons to insurance companies in exchanging information.

- **Intelligence Function.** The intelligence function in arson task forces is normally conducted as an activity performed by investigators. However, certain task forces maintain specialized intelligence personnel, primarily civilian analysts. In a number of cities, Arson Information Management Systems (AIMS) have been developed under U.S. Fire Administration grants. These systems gather and analyze fire and economic data on properties in order to predict future fires and arson patterns. In such cases, the AIMS programs usually function as back-up support for the arson task forces, and they may be housed separately from them. (See Chapter 9 in this Manual on Arson Information Management Systems.)

- **Investigation.** In most arson task forces, fire investigators are given police or fire marshal powers, which usually accompany their completion of police recruit and specialized investigative training. In addition to investigations conducted by interdisciplinary teams within a locality, joint investigations are also conducted with agencies at another level of government (e.g., joint local police-FBI or ATF investigations).

- **Prosecution.** Prosecutors lead a growing number of arson task forces, and attorneys specially assigned to these efforts remain involved with a case from its inception through prosecution and even appeal. Where investigators have the assurance that one or more prosecutors will remain close by for an extended period, the investigators (police and fire) can perform an important training function by introducing the prosecutors to the technical nature of arson, and its unique evidentiary requirements—especially problems of circumstantial evidence.

- **Civil remedies.** Arson task forces frequently provide an insurance company with information to deny a fraudulent claim, or to prepare to defend itself because of a denied claim. Because many arson task forces have specially assigned prosecutors, they can also handle civil suits to recoup back real estate taxes and demolition costs.

The U.S. Fire Administration maintains a special program of technical assistance to help fire and police agencies that want to form arson task forces or improve their current operations. Those interested in seeking such assistance should contact the LEAA-USFA Task Force Program, Office of Planning and Education, U.S. Fire Administration, Washington, D.C. 20472; telephone (202) 634-7553.
I. Sources of Background Information

The control of arson-for-profit requires that the investigator understand aspects of white-collar and organized crime, as well as some dimensions of professional theft crime. To be successful in an arson-for-profit case, the investigator has to dig to find the specific motive of the perpetrator—in order to determine whether the profit motive grew out of a gambling debt, a short-term cash flow problem, a deeper threat of insolvency, or perhaps was the result of real estate speculation. Because the specific motive is such an important issue, the investigator needs to become comfortably familiar with issues such as business operations, fire insurance (and related business interruption coverage), real estate markets, and the whole field of financial investigative techniques.

Since it is impossible for one investigator to become expert in all of these areas, it is important to understand what is possible short of developing that expertise, that is:

- How to find enough technical information to be able to, on one's own, proceed with the investigation; or
- When to seek expert assistance, and where to find such experts.

This section is intended to familiarize the investigator with the growing number of background publications which can be used for "self-teaching" purposes, and to point the investigator toward national associations and other centers of expertise which may be able to respond to a specific request for assistance.

A. Arson Detection and Investigation

While this manual covers the white-collar and organized crime aspects of arson-for-profit, many personnel who are now entering this field come from other disciplines. Police
investigators and especially prosecutors often want to develop an understanding of techniques to determine fire cause; this in order to help them interview informants and witnesses, and to be able eventually to prepare such charges as "arson to defraud an insurer."

Obviously, it is impossible to treat the issue of fire cause determination sufficiently within the pages of this manual. However, police and fire investigators should be aware of a number of other manuals and texts which can provide a relatively brief but comprehensive overview of fire cause and origin procedures. The mention of any book or manual here is not meant as an endorsement, but rather to identify relatively low-cost, easy-to-read, technical information within the grasp of the police investigators and prosecutors. For a very brief introduction, see two articles cited in the Bibliography of Readings which is included in this manual: "Could It Be Arson? How Can You Tell?" and "How to Identify Fire Causes."

Another helpful publication is A Pocket Guide to Arson Investigation, available from the Factory Mutual System, 1151 Boston-Providence Turnpike, Norwood, MA 02062, price $1.00.


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### Training

As nationwide concern with arson has grown, the number of training courses and seminars has likewise increased. The following resources are listed with an emphasis on whether they focus on arson detection (i.e., fire cause and origin) or arson investigation:

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<th>Program</th>
<th>Focus</th>
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<tr>
<td>National Fire Academy</td>
<td>2 courses: Arson Detection; Training the Trainers, and Fire Investigation</td>
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<tr>
<td>U.S. Fire Administration</td>
<td>Arson Investigation</td>
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<tr>
<td>Traffic Institute</td>
<td>Fire Cause Determination and Arson Investigation</td>
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<tr>
<td>Northwestern University</td>
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<td>Evanston, IL 60204</td>
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<td>FBI Academy</td>
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Investigators or training officers who are interested in conducting their own arson training course can obtain curriculum ideas, as well as suggestions for resources, by contacting the National Fire Academy (noted above), and the International Society of Fire Service Instructors (discussed under "National Resources," below).

### B. Investigation and Prosecution of Arson-for-Profit

In addition to this manual, some references are available on the investigation and prosecution of arson-for-profit cases. These include the Insurance Fraud Manual, prepared by the Economic Crime Project, National District Attorneys Association, 666 N. Lake Shore Drive, Chicago, IL 60611; and an arson prosecution handbook being prepared by the California District Attorneys Association under a grant from the Aetna Life and Casualty Company. For further information on the latter handbook, contact the California District Attorneys Association, 555 Capitol Mall, Sacramento, CA 95814.
The book *Combatting Arson-for-Profit* covers techniques on white-collar crime approaches to this problem. Its major focus is on individual, rather than organized, economic arson. For further information, contact Battelle Press, 505 King Avenue, Columbus, OH 43201; price: $27.50.

**Training**

One-day seminars on arson-for-profit investigation are conducted by local offices of the FBI under an LEAA grant, and interested investigators should contact the nearest FBI Field Office Training Officer for information. One-week training courses for state and local investigators are run by the Bureau of Alcohol, Tobacco, and Firearms under an LEAA grant, and are being held in roughly ten regional sites throughout the United States. For information on the next ATF arson-for-profit course in your area, contact the nearest ATF district or regional office.

Two training courses for prosecutors, which cover in part the subject of arson-for-profit, are conducted by the National College of District Attorneys, c/o College of Law, University of Houston, Houston, TX 77004, and by the Southwest Legal Foundation, P.O. Box 707, Richardson, TX 75080.


Investigators who want to learn more about other insurance issues, such as underwriting and claims practices, should look for seminars on arson and its relationship to the insurance industry. A number of such seminars have been held recently by local chapters of the Society of Chartered Property and Casualty Underwriters (CPCU). Information on local programs can be obtained by writing the national Society of CPCU. A brief discussion of its functions is presented below under "National Resources." That discussion of national organizations and associations also covers the National Committee on Property Insurance (NCPI), which is the research and information resource for state FAIR Plans.

**D. Real Estate Markets and Transactions**

Information on insurance practices remains fairly uniform throughout the country because of the nature of that business, but real estate markets vary enormously and are subject to regional, local, and even neighborhood economic factors. Therefore, initially it may seem to the investigator that helpful information on real estate market practices, as well as particular types of transactions, is harder to come by. That is not the case. In order to gain a basic understanding of real estate terminology and practices, the investigator might contact someone who teaches a real estate course at a local community college or university. Such a person would likely be in a position to provide information on factors specific to the local real estate market, and on specific issues such as urban redevelopment and condominium conversions. The investigator might also review a basic text in this field, *Real Estate Law*, by Robert Kratovil (Englewood, NJ: Prentice-Hall, 1974). A guide to real estate research and terminology is *People Before Property* (Boston: Urban Planning Aids, 1972), and it is...
summarized in a subsequent section on "Selected Planning and Operational Support Publications." A major factor in determining the financial condition of properties as investments is their depreciation status for tax purposes. The investigator can obtain an introduction to the depreciation issue by reviewing C. F. Sirmans and James B. Kau, Tax Planning for Real Estate Investors (New York: Prentice-Hall, 1980; price: $16.95 (hardcover) and $7.95 (paperback)). For a more advanced discussion of real estate investments, see Financial Analysis of Real Property Investments (available from: Intercollegiate Case Clearinghouse, Soldiers Field Road, Boston, MA 02163; price: $2.10).

Other sources of information on local real estate practices and conditions include:

- Local planning and redevelopment authorities, especially if they have prepared studies on housing market changes and neighborhood economic stresses.
- Mortgage bankers and especially mortgage brokers.
- Attorneys who specialize in real estate transactions, and more specifically, in the conveyancing aspect of real estate law.

In order to obtain information on federal redevelopment and loan insurance programs, the investigator might contact the closest regional office of the U.S. Department of Housing and Urban Development, and should also review its informative publication, Programs of HUD (1978). A periodical, Disclosure, covers housing and related issues, such as mortgage redlining and arson, from a neighborhood advocacy perspective. Contact: National Training and Information Center, 1123 W Washington, Chicago, IL 60607.

E. Business Practices and Economic Conditions

Again, the investigator who wants to learn more about the inner workings of a specialized business first needs to locate information on that type of business, as well as on the various types of economic stress in that sector. The most comprehensive single source is a master reference, Business Information Sources (Berkeley: U. California Press, 1976), $14.95, which is profiled in the section on "Selected Planning and Operational Support Publications." Additional sources of information include national business and professional associations in the economic sector which concerns the investigator. For information on how to locate such national groups, see Ratio Analysis for Small Business, issued by the Small Business Administration (Washington, D.C.: Government Printing Office, 1977); especially pp. 32-37.

The investigator might also want to locate trade and technical journals which cover a particular type of business. These periodicals pay substantial attention to notifying their subscribers of direct ways that economic trends will affect them. For example, see Credit and Financial Management, published by the National Association of Credit Management, 475 Park Avenue South, New York, NY 10016; annual subscription: $6.00. To obtain information on journals which cover a specific type of business or industry, consult the Guide to American Directories, 9th ed. (Rye, NY: G. Klein, 1975).

A number of federal agencies issue their own reports as well as bibliographies of other publications which cover economic conditions in particular business sectors and regions of the country. For example, see the Quarterly Financial Report for Manufacturing, Mining, and Trade Corporations, published by the Federal Trade Commission, Washington, D.C. 20580, and available on a subscription basis for $6.40 per year. Within the U.S. Department of Commerce, the Bureau of Economic Analysis, the Bureau of Domestic Business, and the Industry and Trade Administration each maintain their own research staffs which prepare publications on business profiles and economic trend indicators. For more information, write to the Director of the respective bureau or division, U.S. Department of Commerce, Washington, D.C. 20230. Regional offices of the Department of Commerce often have copies of
these publications. To locate a specific publication, see the annual U.S. Department of Commerce Publications Catalogue and Index, available from the Government Printing Office, Washington, D.C. 20402.

F. Financial Investigation

This is perhaps the most challenging field for the fire or police investigator, because it seems to require either the development of expertise on his part, or his constant reliance on accounting expertise which is difficult for his agency to obtain. The references and suggestions which follow are intended to provide the investigator with an introduction to financial investigative techniques so that the investigator might pursue the case as far as possible without outside reliance. However, in the event that such expertise is necessary, the investigator should be aware of ways to pose specific questions to help the accountant provide financial assistance which is responsive to the investigator's needs.

Many texts are designed to assist non-accountants in gaining an introduction to this discipline. One of the more comprehensive is Accounting for Non-Accountants, Second Edition, by Clarence Nickerson, which is available from CBI Publishing, 51 Sleeper Street, Boston, MA 02210; 701 pages, $24.95. A number of publications can give the investigator a feel for the types of records normally kept by businesses. See, for example, Financial Recordkeeping for Small Stores, prepared by the Small Business Administration, and available from the Government Printing Office, Washington, D.C. 20402; Stock No. 045-000-00142-3; price: $2.50.

Several texts have been prepared specifically to aid the non-accountant in understanding white-collar crime investigation. See Introduction to Books and Records, prepared by the Financial Crimes Training Unit, FBI Academy, Quantico, VA 22135. A more comprehensive set of accounting problems is contained in Financial Investigative Techniques, which consists of a course book, exercises, and solutions. The set is available from the National Training Center, Internal Revenue Service, 2221 Jefferson Davis Highway, Arlington, VA 22202.


Another publication which the investigator may find informative deals specifically with misleading financial statements. See More Debits Than Credits: The Burnt Investors Guide to Financial Statements (New York: Harper and Row, 1976); price: $14.95.

The Harvard Business School developed the Notes on Financial Analysis. It provides a concise discussion and problem set on how to interpret financial statements and other operating information of a business. (Available from: Intercollegiate Case Clearinghouse, Soldiers Field Road, Boston, MA 02163; price: $1.90 for the set.)

For additional readings which are geared specifically to arson-for-profit investigation, see the two tactical guides by Loretta Campbell, Financial Investigation of Arson-for-Profit and Target Company, Inc.; Balance Sheet, in Part II of this Manual.
trade associations in an effort to coordinate arson prevention measures. This work has involved an examination of laws and regulations governing underwriting procedures, indemnification procedures, model arson legislation, and mortgage claims.

For further information, contact:

American Insurance Association
85 John Street
New York, NY 10038
(212) 433-4400

ECONOMIC CRIME PROJECT (ECP)
NATIONAL DISTRICT ATTORNEYS' ASSOCIATION (NDAA)

The Economic Crime Project is a national effort begun in 1973 to provide central coordination and assistance to the white-collar crime units in member district attorneys' offices throughout the country. At the present time, 72 such economic (or white-collar) crime units are members of the ECP and operate in 34 states. The staff of the Economic Crime Project operates a national clearinghouse for the exchange of information on various fraud schemes in its member jurisdictions and provides members with an analysis of different methods which the offices use to develop criminal cases. The ECP holds periodic meetings of Unit Chiefs, where new types of fraud schemes and means to combat them are shared among the participants.

In 1978, the Economic Crime Project initiated an Insurance Fraud Task Force which addresses arson-for-profit as well as phony accident and medical insurance frauds. Staff and prosecutors on this Task Force developed an Insurance Fraud Manual, one portion of which covers methods to detect, investigate, and prosecute the insurance fraud aspect of arson-for-profit. The ECP staff also publishes the quarterly Economic Crime Digest, which is an information bulletin on recent cases, innovative prosecution techniques, and other items of interest to the white-collar crime enforcement community—investigators and prosecutors.

For further information, contact:

Economic Crime Project
National District Attorneys Association
666 N. Lake Shore Drive, Suite 1432
Chicago, IL 60611
(312) 944-4610
INSURANCE COMMITTEE FOR ARSON CONTROL (ICAC)

The Insurance Committee for Arson Control was formed in late 1978 to coordinate the insurance industry's efforts to combat arson. The ICAC is composed of the property-casualty insurance industry's major trade associations, plus unaffiliated insurance companies. Major activities are carried out through subcommittees and through member organizations represented on the ICAC.

The major activities of the ICAC include:

- Working to improve state legislation for arson control. A primary concern in this area has been development of immunity laws to allow greater sharing of information.
- Increasing public awareness of the arson problem. The Committee has published and distributed the Arson Control Directory: How and Why, Who, What, Where (1979; price, $15.00). The directory provides information on task force development, texts of sample speeches on arson, and a directory of state and national organizations involved in combating arson.
- Supporting the development of state and local arson policy task forces. The committee has provided technical, financial, and other support in this regard.
- Examining and improving industry procedures related to arson, such as the identification of arson-prone situations, evidence handling, prosecution techniques, and internal company procedures.

For further information, contact:
Insurance Committee for Arson Control
20 North Wacker Drive, Suite 2140
Chicago, IL 60606
(312) 558-3800

INSURANCE CRIME PREVENTION INSTITUTE (ICPI)

The Insurance Crime Prevention Institute is a national, not-for-profit membership corporation composed of more than three hundred insurance companies. ICPI's primary purpose is to investigate fraudulent property and casualty insurance claims for the purpose of referring evidence of a criminal activity to appropriate law enforcement and prosecutorial agencies. ICPI does not participate in any way in the settlement of insurance claims.

The Institute initiates its own insurance fraud investigation and assists law enforcement agencies in joint investigations at no cost to the law enforcement agency. ICPI's release of information from claims files is usually dependent upon ICPI's actual involvement in the investigation. ICPI will conduct interviews, investigate claims and related information, access claims files of member companies, attempt to gain access to claims files of non-member companies, file criminal complaints, and testify in court. Information contained in the claims files will normally be made available to law enforcement agencies working with ICPI.

In addition to investigatory support, ICPI provides training assistance to law enforcement agencies. A training film on arson designed for the insurance industry is available to law enforcement. ICPI will also send speakers to training sessions and can assist in the design of special seminar programs. A handbook entitled Insurance Fraud was written for insurance personnel, but is also available for law enforcement personnel.

For further information, contact:
The Insurance Crime Prevention Institute
15 Franklin Street
Westport, CT 06880
(203) 226-6347

INTERNATIONAL ASSOCIATION OF ARSON INVESTIGATORS (IAAI)

The IAAI is a non-profit organization which serves as an information resource and promotes cooperation among its members. The IAAI has approximately 5,000 members representing an assortment of public agencies (fire and police) and private companies involved in combatting arson.

Several publications are available from IAAI. These include a bimonthly journal entitled The Fire and Arson Investigator, which features technical articles on arson and related fraud investigations. Since 1976, an annual publication entitled Selected Articles for Arson Investigators has been made available to members. This publication is a collection of articles previously printed in the newsletter. The bound edition is available from IAAI for approximately $60. In addition, a membership directory is made available each year providing the name and address of each IAAI member.
Arson investigation training is promoted through a variety of state and regional seminars held throughout the country. The IAAI reports on the availability of these seminars, and conducts its own annual national seminar.

Membership in IAAI is $20 per year.

For further information, contact:
International Association of Arson Investigators
P.O. Box 600
Marlboro, MA 01752
(617) 481-5977

INTERNATIONAL SOCIETY OF FIRE SERVICE INSTRUCTORS (ISFSI)

ISFSI has over 2,500 members consisting of fire suppression officers as well as fire service instructors. A clearinghouse has been established to provide a means of information exchange among the members of ISFSI. The ISFSI library contains more than 200 current documents which can be obtained for use as reference material. These reference documents are catalogued in Information Relay, a publication available from ISFSI.

National seminars and conferences are offered throughout the country for members and non-members alike. A monthly newsletter provides up-to-date information on such topics as national news, training tips, coming events, and new reference materials.

ISFSI has not yet developed a specific instructional package dealing with arson-for-profit. However, they have the available resources to do so, and they welcome requests regarding arson-for-profit issues.

For additional information, contact:
International Society of Fire Service Instructors
P.O. Box 88
Hopkinton, MA 01748
(617) 435-3090

NATIONAL ASSOCIATION OF CREDIT MANAGEMENT (NACM)

The Fraud Prevention Department of the National Association of Credit Management (NACM) conducts a national program to combat commercial fraud against creditors. Its subscribers are primarily credit executives representing private companies. The Fraud Prevention Department is funded through annual subscriptions by member organizations.

Subscribers are provided with two major types of anti-fraud assistance. First, NACM will respond to a subscriber's request for assistance in an investigation of possible fraud against the official's company. This assistance often comes in the form of investigative specialists who help prepare evidence for presentation to a law enforcement agency. In addition, a subscriber may request an investigation of a customer suspected of planning fraudulent activities. Despite the time and expense of investigating the professional bankruptcy scam or similar serious cases of credit loss, NACM emphasizes its desire to offer assistance in these types of cases.

Secondly, NACM provides relevant information on the modus operandi of recent fraud schemes or previous cases which it has handled. "Alert bulletins" offer warnings on "over-buy" situations, phony billing, schemes, and check swindles. Details of fraud investigations are mailed directly to all subscribers.

While NACM's involvement in arson-for-profit inquiries is infrequent, it has occurred as a result of the investigation of other fraud schemes such as bankruptcy and mail frauds, and RICO conspiracies. The assistance provided in general fraud cases has carried over to specific arson-for-profit investigations where the latter problem has been combined with suspected credit or bankruptcy fraud.

For further information, contact:
Fraud Prevention Department
National Association of Credit Management
475 Park Avenue South
New York, NY 10016
(212) 725-1700

NATIONAL ASSOCIATION OF FIRE INVESTIGATORS (NAFI)

NAFI is a non-profit organization seeking to promote a better understanding of the technical causes and origins of fires and explosions. Acting as a national clearinghouse, NAFI distributes technical information, keeps fire records, reports on legislation, and distributes a newsletter informing members of recent developments in the field of fire investigation. Requests for assistance that are received from non-members are often referred to a local NAFI member residing near the inquirer. NAFI is also involved in the development and sponsorship of several educational and training seminars each year.
Membership in NAFI is $10 per year.

For further information, contact:
National Association of Fire Investigators
53 West Jackson Boulevard
Chicago, IL 60604
(312) 939-6050

NATIONAL ASSOCIATION OF INSURANCE COMMISSIONERS (NAIC)

The NAIC consists of the commissioners of state insurance departments. The primary work of the NAIC is done through committees which work on specific policy issues. A committee formed to deal with arson has focused on reform of state insurance laws and regulations. The arson topics addressed by the committee include: FAIR plans and their possible effect on arson-for-profit, the dilemma of delayed claims settlement versus the civil liability of insurance companies; and issues dealing with insurance underwriting procedures.

Although the arson committee's written reports are not widely published, they are available to interested parties. These reports include results of the committee's work on recommended legislative and regulatory policies which NAIC feels could help combat the arson problem. Work on issues such as insurance claim procedures and immunity standards for gaining access to insurance information has also been undertaken. A draft of model insurance immunity legislation is available by writing to NAIC.

For further information, contact:
National Association of Insurance Commissioners
Attention: Arson Information
631 W. Wisconsin Avenue, Suite 1015
Milwaukee, WI 53203
(414) 271-4464

NATIONAL AUTOMOBILE THEFT BUREAU (NATB)

The NATB is a non-profit service organization supported by member insurance companies. The Bureau actively assists law enforcement personnel in the investigation of motor vehicle thefts (including motorboats and off-road construction equipment), auto fires, and related fraud schemes.

Two areas of specific concern are the identification of vehicles bearing altered or obliterated identification numbers and the investigation of professional fraud rings, including those which burn autos which were falsely reported as stolen. NATB also offers assistance in the development of educational programs on investigative techniques, and NATB maintains the computerized North American Theft Information System (NATIS) allowing rapid access to NATB records.

NATB investigations are usually conducted in conjunction with a law enforcement agency. The latter can obtain the name of a policyholder's insurance carrier and other insurance information from NATB. NATB will assist the agency in investigative searches if the information is not readily available from NATB records. NATB can also be called upon to sign a criminal complaint under authority delegated to its agents by the member insurance companies. The Auto Theft Information System is not part of the Property Insurance Loss Register of the American Insurance Association, so policyholders with prior or multiple claims will not show up as a result of an NATB search. However, prior stolen car reports, including those accompanied by incendiary or suspicious fires, involving owners are available from NATB.

The NATB specialists are available for consultation on investigating auto fires. Also, audio/visual training programs are distributed for vehicle arson investigation training. NATB also publishes the pocket manual, The Investigation of Automobile Fires.

For further information, contact:
National Automobile Theft Bureau
10330 South Roberts Road
Palos Hills, IL 60462
(312) 430-2430

NATIONAL CENTER ON WHITE-COLLAR CRIME

The National Center on White-Collar Crime is a resource program of expertise, training, and technical assistance. Created under an LDAA grant, its purpose is to develop and expand the understanding of white-collar crime enforcement techniques among investigators and prosecutors. The National Center provides its services in four ways:

- First, development of the "Model Curriculum and Training Guide on Programs to Combat White-Collar Crime." The curriculum provides a series of steps which training officers should follow in setting up or adapting a white-collar crime enforcement program for their personnel.
Second, the Model Curriculum forms the basis of Comprehensive Training Courses on white-collar crime enforcement techniques, which are held either at Battelle in Seattle or at a selected location on the East Coast. The course combines planning and tactical, criminal and civil, and investigator-prosecutor interdisciplinary approaches to this field.

Third, the National Center has developed a series of Operational Guides to White-Collar Crime Enforcement, each of which addresses a specific planning issue or substantive crime problem. Topics covered by the operational guides include "Investigative Planning," "The Intelligence Process in White-Collar Crime Enforcement," "Interviewing and Interrogation," and "Determination of Undisclosed Financial Interest."

Fourth, the National Center maintains a technical assistance capability which is designed to place an inquiring investigator or prosecutor in touch with another such expert who has had experience with the problem at hand. This service of the Center can also identify a written guide or manual on most fraud-related subjects. The National Center also publishes Update on a periodic basis, and this technical newsletter covers current literature and other national and local developments in white-collar crime enforcement.

While the National Center does not focus specifically on arson or arson-for-profit, it maintains a collection of operational materials on insurance fraud, as well as innovative civil remedies to combat all types of white-collar crime, including arson-for-profit.

For further information, contact:
National Center on White-Collar Crime
Battelle Law and Justice Study Center
4000 N.E. 41st Street
Seattle, WA 98105
(206) 525-3130

NATIONAL COLLEGE OF DISTRICT ATTORNEYS (NCDA)

Through the cooperation of various attorneys' associations, NCDA was established as a private, non-profit organization to provide continuing education for prosecuting attorneys. Between 25 and 30 educational seminars on many topics are provided each year.

During the past year, NCDA offered five separate 2-1/2-day training courses on arson prosecution. Although specific lectures on arson-for-profit were not included, the course material did address arson-for-profit, including a discussion of the profit motive.

NCDA can develop or provide advice on developing arson-for-profit training programs for prosecutors. A variety of instructors used in previous arson seminars are available to NCDA for future training purposes.

For further information, contact:
National College of District Attorneys
Bates College of Law
University of Houston
Houston, TX 77004
(713) 749-1571

NATIONAL COMMITTEE ON PROPERTY INSURANCE (NCPI)
The NCPI functions as the national trade organization for state FAIR plans. It provides guidance to the FAIR plans on issues of claims handling and underwriting.

In early 1979, an Arson Task Force was formed to assist in the development of an "anti-arson action plan." As a result of this Task Force, a national seminar on arson control strategies and FAIR plans was conducted in January 1980. By mid-1980, NCPI plans to have a comprehensive publication on the arson issue ready for distribution. The publication will cover three major areas: (1) a general discussion of arson-for-profit vis-a-vis the FAIR plans; (2) an analysis of underwriting techniques and how to prevent problems such as overissuing; and (3) a guide on how to effectively handle insurance claims as part of a post-fire investigation.

For further information, contact:
National Committee on Property Insurance
55 Court Street
Boston, MA 02108
(617) 367-5912

NATIONAL FIRE ACADEMY

The National Fire Academy serves as the training component of the U.S. Fire Administration. The Academy offers two...
training courses on arson: (1) a three-week basic investigations course, and (2) a one-week course on arson detection. These courses are presented regularly throughout the year and usually at two different locations. One location always includes the academy site in Emmitsburg, Maryland. The other locations for the courses are selected from various regional sites throughout the United States.

Arson-for-profit is not a specific topic in either course curriculum, but issues related to arson-for-profit are addressed throughout the course. For example, part of the basic arson investigation course deals with the investigation of insurance claims and the review of policy records.

The material used in both courses has been compiled in one package. This course package has been distributed to all State Fire Marshals and to the major city fire departments. The National Fire Academy can provide the reader with the names and addresses of the nearest available official having access to the total training package.

Fire Academy officials feel their training program offers an introductory examination of the arson-for-profit problem which can be followed up by more specific course work such as the ATF or FBI seminars on arson-for-profit.

For further information, contact:
National Fire Academy
Route 1, P.O. Box 10A
Emmitsburg, MD 21727
(301) 447-6771

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

The NFPA is a non-profit organization created for the development of standards and the promotion of education in fire protection. Currently, 400 insurance companies which write approximately 90 percent of the property insurance in the United States. The reports filed by the claims adjusters include the following information:

1. Names of insured, spouse, alias, and tenants
3. Type of occupancy
4. Cause of loss, if known
5. Time and date of loss
6. Insurer(s) and amount of coverage.

The PILR system became fully operational in January, 1980. It is intended that when a claims adjuster submits a property insurance loss report to PILR, the information will be recorded and an immediate search of the PILR files will be initiated.

broken down by arson versus non-arson; however, they can be analyzed by NFPA to provide information on fire incidence patterns. This information is available to members and non-members for a minimal service charge.

NFPA has scheduled 11 one-day seminars on arson investigation in 1980, focusing primarily on fire scene examination. By June 1980, NFPA expects to have a slide presentation package available pertaining specifically to arson-for-profit investigation.

Membership in NFPA is $40 per year.

For further information, contact:
National Fire Protection Association
470 Atlantic Avenue
Boston, MA 02210
(617) 482-8755
The search is expected to result in the detection of other fires on record which bear similar characteristics to the one reported. This information will then be returned to the claims adjuster via a designated person within the member company.

The only way a police or fire investigator can obtain direct access to the PILR system (i.e., without going through a company claims representative) is by subpoena. However, PILR information may be obtained indirectly by an exchange between the appropriate claims adjuster and law enforcement officer. For example, if a law enforcement officer is investigating a recent fire, information on the date and location of loss and the insured’s name (if known) can be submitted to PILR. A search will be conducted, and any pertinent information relating to that loss will be conveyed to the claims adjuster who originally submitted the report. PILR will ask that adjuster to contact the investigator and convey the information. Such indirect exchanges are strictly governed by privacy, security, and insurance immunity laws.

The information cannot be used for such purposes as underwriting, credit reports, or for business statements.

For further information, contact:
Property Insurance Loss Register
700 New Brunswick Avenue
Rahway, NJ 07065
(201) 388-0157

SOCIETY OF CHARTERED PROPERTY AND CASUALTY UNDERWRITERS (CPCU)

The Society of CPCU is a national organization composed of underwriters who have successfully passed a series of underwriting examinations. The organization is designed to provide continuing education and training on issues of concern to the insurance industry.

Through a nationwide network of chapters, the Society conducts a variety of seminars, clinics, workshops, and mini-classes. A monthly newsletter, CPCU News, provides information on recent developments in the insurance field, and the Society publishes a journal on insurance practices entitled CPCU Annals.

Research is encouraged and the Society periodically publishes monographs on various subjects, including arson. In November, 1978, the Chicago Chapter issued a report, entitled "Arson-for-Profit," which discussed the underwriting-adjusting process as it pertains to arson-for-profit. Seminar and workshops deal with such issues as arson and insurance fraud, and their relationship to underwriting practices.

For further information, contact:
The American Institute for Property and Liability Underwriters
Providence and Sugartown Roads
Malvern, PA 19355
(215) 644-2100

III. Selected Planning and Operational Support Publications

ARSON: A MULTIFACETED PROBLEM
Prepared by Public Technology, Inc., for the U.S. Fire Administration, 1980, 48 pages, $2.50

Referred to as an "information bulletin" by its authors, this publication provides useful information on the efforts of various organizations to combat arson. The organizations reviewed include federal agencies, U.S. Congress, insurance organizations, fire service organizations, and an assortment of "others" such as the American Bar Association and National League of Cities. On the state and local level, anti-arson programs in several jurisdictions are outlined by the authors. Legislative proposals are described along with the research and development efforts being conducted by private organizations. A separate section of the booklet contains the address of each of these organizations, including the name of a key contact person. Anti-arson-for-profit efforts are not listed separately, but instead are incorporated within the discussion of each separate jurisdiction and organization. The final section of the publication offers a selected bibliography of arson-related readings used in the preparation of the bulletin.

For further information, contact:
Program Manager, Fire Safety and Disaster Preparedness
Public Technology, Inc.
1140 Connecticut Avenue, N.W.
Washington, D.C. 20036
(202) 452-7803
The Arson Analysis Newsletter (AAN) is a bimonthly publication of Systems Engineering Associates and is available by subscription. The AAN is primarily directed toward providing the reader with a better understanding of the technical aspects of arson fires. More specifically, the newsletter's features usually deal with analytical methods to identify flammable liquids or explosive residues. In this respect, it provides useful information for investigators desiring greater knowledge about the causes and origins of fires.

Articles in the newsletter are contributed by various forensic scientists and arson investigators throughout the country. In addition to technical issues, a number of other relevant topics are often covered in AAN. For example, a recent issue offered a five-page summary of proceedings of the 1979 California Conference of Arson Investigators. Several important court cases discussed at the conference were outlined in the newsletter. Other conference topics summarized by AAN included eavesdropping, public media relations, ATF's national arson effort, and the physical and chemical properties of consumer products.

Another section of the newsletter presents recent developments in the arson field and serves as a medium for requesting information from the readers on particular topics.

The subscription price for AAN is $6.00 per year for U.S. residents and $20.00 per year for subscribers outside the U.S.

For further information, contact:

Arson Analysis Newsletter
Systems Engineering Associates
7349 Worthington-Galena Road
Columbus, OH 43085

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The U.S. Fire Administration publishes this bulletin several times a year in an effort to provide information on current arson prevention and control topics. Each issue has a feature article along with other articles in many arson subject areas. For example, a recent issue had a four-page feature article on statewide arson organizations. The same issue also contained articles on the rural arson problem, the availability of "mass media kits" on arson, and two articles focusing on juvenile arson. In addition, the "arson news" section of the bulletin facilitates the exchange of information concerning arson educational programs, written resource material, and innovative arson efforts nationwide.

For further information, contact:

Arson Resource Center
Office of Planning and Education
U.S. Fire Administration
Washington, D.C. 20472

This publication examines four topic areas of concern in the development of an arson prevention and control program:
1. Management of anti-arson activities and resources;
2. Investigation and prosecution;
3. Economic factors; and

The first section on management of activities provides lists of various strategies used to combat arson. The lists include statewide arson organizations, metropolitan arson task forces, local arson units, data resources, early warning systems, public education programs, community organizations, and legislative proposals. For each of these strategies, the directory provides the name of a contact person along with the name and address of the appropriate agency.

The investigation and prosecution section identifies training and education programs, lists arson detection equipment manufacturers, and provides a state-by-state listing of forensic laboratories available for analyzing arson evidence.

The section on economic factors lists some insurance industry programs, while the behavioral factors section examines programs dealing with the juvenile firesetter. An additional section at the end of the directory provides names and addresses of private associations, research organizations, and federal agencies involved in controlling arson.

For further information, contact:
Arson Resource Center
Office of Planning and Education
U.S. Fire Administration
Washington, D.C. 20472
(202) 634-7553

BUSINESS INFORMATION SOURCES

by Lorna M. Daniels,
University of California Press:
Berkeley, 1976, 439 pages, $14.95

This comprehensive book is an annotated guide to a wide variety of business publications and other reference sources. The first section of the book outlines general sources of business information such as directories, statistical publications, industry surveys, bibliographies, and abstracts. The second half of the book addresses substantive areas of business such as accounting, finance, insurance, and real estate. Material in both sections can be of use to the arson investigator or prosecutor. Information on particular kinds of companies and industries can be obtained from the first section, while sources of information on investigative categories such as real estate transactions or insurance practices are found in the remaining section. The well-organized, annotated features of the book make it a relevant, easy-to-use resource tool for the reader.

The book costs $14.95 and is available at many public libraries.

CHASING PAPER: A RESEARCH MANUAL FOR ARSON INVESTIGATORS

by Harvey H. Schmidt, 1979, 24 pages, $3.00

This manual is directed toward investigators and prosecutors involved in background research in arson cases. The author examines the collection and analysis of information from public and private sources for use in establishing a financial motive for an incendiary fire. Information sources are categorized according to municipal, county, state, federal, and private records. Under each category the author presents a detailed, step-by-step procedure for analyzing each record. Special focus is directed toward documents filed at the registry of deeds—such as deeds, mortgages, leases, tax liens, attachments, etc. The final section of the manual provides the reader with a quick guide on how to interpret the information obtained from the record search. Under each category the author lists several "red flag" indicators which signify possible motives for arson. A variety of feasible explanations for these indicators are given, and it offers the reader a checklist for further investigation.

For further information, contact:
Harvey H. Schmidt
P.O. Box 1155
Boston, MA 02103

COMBATTING ARSON-FOR-PROFIT: ADVANCED TECHNIQUES FOR INVESTIGATORS

by David Loove, Vernon Wherry, and J. David Schroeder,
Battelle Columbus Laboratories, 1979, 112 pages, $27.50

This guide presents a model for structuring arson-for-profit investigations. It is geared toward the investigation of individually perpetrated, rather than organized, arson-for-profit schemes. One section of the guide
focuses on investigative planning, and a useful overview of the planning process is presented. The authors distinguish between field and support activities in conducting the investigation. Various sources of documentary evidence are given with a follow-up discussion on how to obtain such documents and how to handle them once obtained. The final chapter deals with the presentation of investigative information via investigation reports and grand jury summaries. Additional material is presented in the five appendices to the guide. Appendices one through four deal with applicable federal and state statutes related to arson and arson-for-profit, sample news release forms, sample forms for obtaining evidence, and a sample consensual monitoring form. The final appendix documents an actual arson-for-profit case through the use of a sample investigative report, grand jury summary, and an investigative flow chart.

For further information, contact:
Battelle Press
505 King Avenue
Columbus, OH 43201
(614) 424-6393

EXEMPLARY PROJECTS: PROSECUTION OF ECONOMIC CRIME
by Peter Finn and Alan R. Hoffman,
for the Law Enforcement Assistance Administration, 1976, 161 pages, $2.90

This manual provides a detailed description of the economic (i.e., white-collar) crime units in operation in the district attorney's offices of San Diego, California, and Seattle, Washington. This information can be helpful to arson investigators and prosecutors by providing guidelines on the planning and operation of a white-collar crime approach to arson-fraud. Two chapters of the manual are devoted to an extensive examination of the prosecution units. Issues covered by the authors include defining the goals of the unit, organizational structure, staffing, case development and disposition, funding, and evaluation of project results. Using the exemplary results of these two economic crime programs, the authors address the major organizational issues and offer some suggestions on the successful implementation of similar programs. Appendices include a list of federal, state, and local support agencies that may be able to provide assistance, sample forms to be used for case handling and evaluation purposes, and finally, a summary paper on the lessons learned from the implementation of economic crime units in general.

Copies of this publication are available through:
Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402
Stock No. 045-000-00139-3

HOW TO READ A FINANCIAL REPORT
by Merrill Lynch, Pierce, Fenner, and Smith, Inc., 1979, 31 pages, free

This booklet is directed toward the non-accountant interested in gaining a better understanding of a corporation's financial position. By analyzing various financial statements
in a concise, understandable manner, this publication provides a useful resource tool for the arson investigator or prosecutor. The authors present a line-by-line description of the contents of four different financial statements for a hypothetical, publicly held company. These statements include the balance sheet, the income statement, the accumulated retained earnings statement, and the statement of source and applications of funds. In addition to the line-by-line description, an analysis is offered on how to interpret the figures reported in the statements. This analysis covers topics such as profitability and liquidity ratios, leverage, extraordinary items, earnings per share, and price-earnings ratio. A final section of the booklet offers some advice on the importance of statement footnotes for obtaining further information.

For further information, contact:
Merrill Lynch, Pierce, Fenner, and Smith, Inc.
One Liberty Plaza
165 Broadway
New York, NY 10080

THE INVESTIGATION OF WHITE-COLLAR CRIME:
A MANUAL FOR LAW ENFORCEMENT AGENCIES
by Herbert Edelhertz, Ezra Stotland, Marilyn Walsh, and Milton Weinberg, Battelle Law and Justice Study Center.
Prepared for the Law Enforcement Assistance Administration, 1977, 325 pages, $6.00

The primary theme of this publication is that there are common problems to be overcome in the preparation and conduct of any white-collar crime investigation. This publication can be useful for the arson-for-profit investigative unit by assisting the reader in developing effective, overall investigative strategies and techniques. The section in the manual on "The Elements of White-Collar Crime" is especially relevant. This section provides important guidance on conducting an investigation by demonstrating how to identify and target certain kinds of information and evidence needed to construct a solid fraud case.

The authors go into detail as to how the investigator should actually obtain information and evidence. These sections include such topics as interviewing and interrogation, covert operations, public record searching, and locating victim/witnesses. Other chapters of the manual are also relevant for the arson-for-profit investigator. Organization of the white-collar investigative unit is examined, including a discussion of interagency cooperation, public relations, and the prosecutor-investigator relationship. Another chapter of the manual looks at the various uses of intelligence and how to obtain intelligence on white-collar crime. The computer as an investigative resource is described by the authors. Evaluation methods for any white-collar crime effort completes the text of the manual. Appendices include a guide on training techniques, a list of sources of information, a glossary of white-collar crime terms, a bibliography, and a separate guide on financial investigative techniques.

For further information contact:
Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402
Stock No. 027-000-00507-1

MANUAL FOR THE INVESTIGATION OF AUTOMOBILE FIRES
National Automobile Theft Bureau, 1977, 55 pages, no price noted

This pocket-sized handbook offers a concise, convenient guide for investigating suspected incendiary causes in automobile fires. Suggested investigative procedures are given for insurance adjusters and claims personnel. Investigating officers are given advice on important issues such as the inspection of salvage, interviewing owners and witnesses, and obtaining additional information to support the investigation. The results of various types of simulated arson tests are outlined. These tests point out the potential incendiary nature of automobile fires originating at different locations of the vehicle. The manual also lists the addresses of several regional offices of the NATB, as well as the national office. An appendix is provided which lists the flash points of various oils and volatile liquids.

For further information contact:
National Automobile Theft Bureau
10330 South Roberts Road
Palos Hills, IL 60482
(312) 430-2430
This directory is a useful sourcebook of thousands of scientific, medical, and technical experts available to serve as consultants and as expert trial witnesses. The first part of the book focuses on forensic experts from a broad spectrum science, to engineering. This section of the book is followed by over 200 pages of entries of specialized professional and technical consultants.

Both sections of the directory can be of use to the arson investigator or prosecutor. Experts in general disciplines such as chemistry, economics, psychology, or criminology can be readily located in the first section. Specialized experts in fire and explosions (including arson), fire protection engineering, valuation and appraisal, salvage operations, litigation, housing, and finance represent a few of the categories offered in the second half of the directory.

The directory lists the experts alphabetically under each category along with the individual's address, area(s) of specialty, affiliation with an organization, and degree(s) or license(s) attained. More detailed biographies of each expert evidence testing laboratories available for investigative and prosecutive support.

This publication may be purchased for $47.50, plus a $2.00 handling charge.

For further information, contact:
Forensic Services Directory, Inc.
P.O. Box 305
Fair Lawn, NJ 07410
(201) 797-4343

People Before Property: A Real Estate Primer
And Research Guide

Urban Planning Aid, Inc.,
Boston, Massachusetts, 1972, 169 pages, $5.90

Presented as a manual for uncovering abuses in the real estate market, this handbook provides a useful guide to the arson investigator seeking more information on real estate ownership. Different forms of ownership are described, including trusts, institutional holdings, and "straws." Concepts often used in real estate transactions are defined. These concepts include mortgage loans, taxes, and profit measures.

The second part of the guide outlines the various sources of information available to the investigator. The authors examine the following: different public records available, local real estate guides published, information available in libraries, and an assortment of other sources such as newspapers and personal interviews.

In the final section of the handbook, the authors describe how to research specific parcels of property, owners, companies, banks, and mortgage lenders. This is presented in a step-by-step format in which the reader is asked to address a set of pertinent questions.

The handbook includes a glossary and several appendices, among which are several of particular interest: a sample of a deed and samples of first and second mortgage documents. The author offers a layperson's explanation for various features of these documents.

For further information, contact:
The Midwest Academy
600 W. Fullerton
Chicago, IL 60614
(312) 929-6525

Program Model on Arson Prevention and Control

Prepared for the National Institute of Justice of LEAA, this publication surveys various nationwide approaches that have been employed to combat arson. It is designed as a guide for law enforcement agencies, fire departments, and community groups on how to develop effective arson prevention and control measures. Although written for all types of arson, many portions of this document specifically deal with arson-for-profit issues.

The publication begins with a nationwide overview of the arson problem. Subsequent chapters examine arson task forces and arson units using examples from selected cities. Issues dealing with arson investigation and preventative strategies are then covered. The authors also provide a summary of statutes on arson and various laws affecting insurance
practices. The latter are especially relevant for arson-for-profit cases, and they include such issues as possible changes in "valued policy" laws, disclosure of true property ownership, modification of FAIR plans, and arson reporting immunity laws. The final chapter of the publication covers the various arson and fire data collection and analysis systems. This includes various reporting systems (e.g., PILR), information management systems, and early warning systems. Two of the appendices suggest model legislation—one for an arson penal law, and the other for an arson reporting immunity bill. The third appendix offers a summary table of arson prevention and control measures in the six cities visited by the authors.

For further information, contact:
Office of Development, Testing, and Dissemination
National Institute of Justice
U.S. Department of Justice
Washington, D.C. 20531

RESEARCH: A MANUAL FOR ARSON ANALYSIS AND PROPERTY RESEARCH
by Michael Stone and Mark Zanger,
Urban Educational Systems, Inc., 1979, 290 pages

This manual is based on the arson research experience of the authors in the Boston area. It provides a useful guide for arson-for-profit investigations by outlining various sources of information, what information to look for, and how to organize the information obtained. Each of these areas is covered under separate chapters focusing on research of particular buildings, research of particular owners, and research of patterns of ownership within a neighborhood. Specific issues discussed include: prior fire history, investment profitability, ownership interests, organized ownership links, and financing methods.

The second section of the manual offers an excellent examination of the legal and economic aspects of the real estate business. The various forms of ownership (e.g., partnerships, corporations, trusts, straw, etc.) and how they relate to arson are covered. Characteristics of financing and profitability are then discussed with a particular emphasis on rental housing ownership.

Sources of public record information are outlined in the final section of the manual. The authors define the various records, describe where they can be found and what they contain, and offer samples of what such records may be expected to look like.
CHAPTER 9: ARSON INFORMATION MANAGEMENT AND EARLY WARNING SYSTEMS

Introduction

This chapter offers a profile of the arson information management (AIM) systems funded by the U.S. Fire Administration in four cities--New Haven, New York, Boston, and Phoenix.

The general similarities among the four systems are quite evident. They all use electronic data processing equipment to streamline the collection and analysis of fire and arson-related information. All four systems use some form of statistical or other information analysis to determine the correlation between arson fires and other variables. Arson prevention measures are outlined by all four jurisdictions as a strategic option for what to do with the arson information once it is obtained.

Despite these similarities, the four AIM systems represent a range of available options which the reader can use as a guide to determine the most appropriate AIM system for his/her jurisdiction. For example, the Phoenix system is based on a reactive strategy. The arson prevention measures designed for that jurisdiction come from post-fire incidence reports. The other three jurisdictions, on the other hand, have developed early warning systems used to target pre-arson building risks. For this reason, Phoenix does not require sophisticated computer hardware or software. The non-predictive feature of their system can be handled by a less complicated (and less expensive) processing machine.

The early warning systems in New Haven, New York, and Boston have each relied on a mixture of manual and electronic systems. They have attempted to implement gradually the electronic data processing aspects of their AIM systems in order to facilitate the changeover. The increased complexity
compared to the Phoenix system, in turn, offers these three cities a highly versatile and potentially effective arson prevention system.

New York has been extremely innovative in studying the potential uses of a sophisticated AIM system. Their staff has proposed a variety of programs, and significant progress has been made in their efforts to bring together the massive amounts of information found within their jurisdiction. New Haven has probably gone the farthest in actually developing and implementing an AIM system. The statistical analysis done by New Haven to this point offers an excellent guide to agencies just beginning to develop their own system. The Boston AIM system has done extensive work in the areas of statistical analysis and computer software development, as indicated by their complex AIM system.

In short, the reader is advised to carefully review the following profiles in order to get a better understanding of where his/her own AIM system needs may lie. The basic tradeoff may be that a more versatile, predictive system necessitates more resources and greater staff expertise.

I. New Haven Arson Warning and Prevention System (AWPS)

A. Purpose of the System

The primary purpose of the New Haven model is to prevent arson incidents from occurring by predicting those buildings most prone to an arson fire in the near future. The intention of the program is for preventive measures to be undertaken by city officials (e.g., through increased housing and building code enforcement); law enforcement agencies (e.g., increased arson patrols of "at-risk" areas); insurance companies (e.g., to monitor increases in insurance coverage); and financial institutions (e.g., to consider risk information when making loan application decisions). In addition, the information provided by the early warning system will be applicable for post-fire investigations. Such uses include: distinguishing common characteristics in arson fires, identifying public adjusters and insurers frequently involved with policyholders who suffer arson losses, and obtaining information on property history.

B. How the New Haven AWPS Works

The arson warning system is based on the concept that a certain set of "events" (independent variables) is closely associated with the item which is to be predicted (dependent variable). In this case, the dependent variable is an arson fire. To determine which independent variables could best predict future arson fires, the New Haven analysts examined historical data for a five-year period and tested the relationship between different independent variables vis-a-vis arson fires.

The first step involved obtaining information on the dependent variable (arson fires). A list of arson fires was obtained using these criteria:

- All structural fires occurring between January 1973 and September 1978 in occupied buildings where there was a monetary loss and the cause of the fire was listed as suspicious, incendiary, vandalism, or reckless burning;
- All structural fires between January 1973 and September 1978 in vacant buildings (regardless of loss or cause), and
- All structural fires between January 1973 and September 1978 in occupied buildings where there was a monetary loss and the cause was listed as "undetermined." These incidents were reexamined to determine whether the cause of the fire was, in fact, suspicious. A limited number of these were included in the list.

The result of this information gathering process was a list of 1,432 structural fires, identified by street address. From this list, a random sample of 110 was chosen for the actual analysis. In addition, along with the selection of this dependent variable list was the corresponding selection of a control group. This latter group was selected from fire
records of buildings which had not sustained a suspicious fire during the 1973-1978 time period. Buildings in this control group were selected by matching their characteristics on such features as use, size, construction material, and number of dwelling units with similar characteristics in the sample of structural fires. This selection process involved the use of on-site visits to buildings eligible for placement in the control group category.

The next step in the development of the prediction system involved the selection of the various independent variables to be statistically analyzed vis-a-vis the dependent variable. The original variable list included over 200 possible specific items under a wide range of categories. Information was collected from the city building department, clerk's office, tax collector's office, fire department, housing conservation and code enforcement agency, and police department.

For each structural fire in the sample and for each control group member, the information regarding the various independent variables was gathered and coded on worksheets, then keypunched in preparation for computer analysis. A statistical package called SAS (Statistical Analysis Systems) was used to analyze the correlation between the various independent variables and the arson fires. Through the use of frequency procedures and a statistical regression model, the variable list was ultimately reduced to four key indicators or "trigger" variables:

- Total amount and years of tax arrearage,
- Previous structural fires,
- Housing code violations issued by the New Haven Housing Conservation and Code Enforcement Agency, and
- Lien claims on the property.

Statistical analysis revealed that 78 percent of the variance in arson incidence between the structural fire group and the control group could be explained or accounted for by these four variables.

Having determined the "trigger" variables for an arson prediction system, the New Haven staff is now in the process of designing a system to implement the findings. A decision was made to collect a two-year back history on each of the four (4) trigger variables. Information on structural fires, tax arrearages, housing code violations, and liens which occurred or were issued in New Haven between January 1, 1977, and December 30, 1979, was collected. This work was done manually, utilizing off-duty firefighters, student interns, and the AWPS staff.

Once collected, the information was recorded and stored by address, on different colored index cards. The cards are arranged alphabetically, and a master list of each address and the trigger variables which are present there are now available. These lists form the basis of the at-risk group.

Buildings which indicate the presence of all four trigger variables are "red-flagged" for immediate arson prevention intervention by the AWPS staff. In addition, various combinations of three trigger variables at an address are "red-flagged" for intervention. Additional information on "red-flagged," or at-risk, buildings is obtained prior to the actual contact with the owner of the building. The assessed value of the building, insurance information, a physical description of the property, and additional data regarding the mortgage are obtained. Thus, a great deal of information is available to the AWPS staff regarding these at-risk buildings.

C. Testing, Implementation, and Evaluation

The New Haven early warning system is undergoing testing of the "trigger" variables. Actual implementation of the model and its preventive measures are scheduled to begin in March, 1980. An important part of the evaluation of the system will involve the degree to which the various organizations receiving the "at-risk" information can act on it to reduce, cooperatively, the arson problem.
D. Resources Required

1. Staffing. Responsibility for design of the early warning system was given to both the Director of Planning and Information Services in the New Haven Fire Department and to a civilian coordinator specifically hired for this purpose.

The methods used in determining the "trigger" variables involved collecting an extensive amount of information regarding building history and financial characteristics. Four firefighters from the New Haven Fire Department were hired to work ten hours per week during their off-duty hours collecting this information from various city agencies. In addition, several student interns from area colleges helped with the data collection as part of the city's intern program.

The city agencies involved were solicited for their support. The head of each city department involved in the program was invited to a meeting with the AWPS staff.

The information which needed to be gathered regarding the "trigger" variables was done by seven firefighters hired on a part-time basis during off-duty hours. It is expected that as the manual collection of this data is reduced, the number of data researchers required will also be reduced. AWPS staff presently includes a program coordinator, a housing rehabilitation specialist, an administrative assistant, and a secretary. Future plans for staffing include a full-time AWPS insurance adjuster and a part-time computer programmer/statistician.

2. Equipment. The statistical analyses performed by the AWPS staff required the use of a computer. Key punching and data processing facilities at the Yale University Computer Center were utilized. The availability of the SAS packaged computer program was also necessary for the statistical analyses.

3. Funding. The original design and data collection of the early warning system was accomplished under a $10,000 award made by Factory Mutual Engineering Systems. The testing phase of the program was funded by the U.S. Fire Administration. The implementation phase presently underway is being funded by the Aetna Life and Casualty Company.

4. Access to Essential Records. Other types of resources required to effectively design, test, and implement an early warning system are the various records held by public or private organizations.

In the case of the New Haven model, the following categories of information were collected for the initial analysis:

<table>
<thead>
<tr>
<th>Source</th>
<th>Type of Record</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building Department</td>
<td>--Building code violations and abatements</td>
</tr>
<tr>
<td>City and Town Clerk</td>
<td>--Type of conveyances</td>
</tr>
<tr>
<td>Collector of Taxes</td>
<td>--Transfers of property</td>
</tr>
<tr>
<td>Fire Department</td>
<td>--Liens on property</td>
</tr>
<tr>
<td>Housing Conservation and Code Enforcement</td>
<td>--Number of years back taxes owed</td>
</tr>
<tr>
<td>Agency</td>
<td>--Address where tax bills are sent</td>
</tr>
<tr>
<td>Police Department</td>
<td>--All structural fire responses</td>
</tr>
<tr>
<td></td>
<td>--Use and occupancy of structures at time of fire</td>
</tr>
<tr>
<td></td>
<td>--Situation found at fire</td>
</tr>
<tr>
<td></td>
<td>--Ignition factor at fire</td>
</tr>
<tr>
<td></td>
<td>--Property damage loss from fire</td>
</tr>
<tr>
<td></td>
<td>--Fire code violations and abatements</td>
</tr>
</tbody>
</table>

For further information, contact:

Arson Warning and Prevention System
157 Church Street, Room 307
New Haven, CT 06510
(203) 787-7662
II. New York City: Arson Analysis and Prevention Project; Information Analysis Project; and Landlord Contact Programs

A. Purpose of the System

The primary purpose of the combined Arson Information Analysis, Prevention, and Landlord Contact Projects is to improve the availability of ownership and building information research resources for arson investigators in New York City, and to use the results of that research to prevent future arsons. It is intended that the computer access to data in various city agencies will facilitate arson-for-profit investigations of the linkage between various property owners and the fires they experience.

The Arson Analysis and Prevention Project will develop an Arson Risk Prediction Index (ARPI) which will serve as an early warning system. The index will be used to: (1) identify arson-prone buildings, (2) identify arson-prone neighborhoods, and (3) facilitate post-fire investigations by allowing prioritizing of fire incidents according to the likelihood of their being arson-caused.

A third component, entitled the "Landlord Contact Program," will utilize the above arson risk prediction index. "High-risk" landlords would be identified and targeted for a set of proactive measures designed to discourage the possibility of arson occurrence.

B. How the Programs Work

The Arson Information Analysis project is designed to gain access to the computer systems of various city agencies by way of computer terminals located in the Arson Strike Force office. City departments such as the Finance Department, Housing Preservation and Development Department, and the Department of City Planning presently use computer systems to store and retrieve information.

By July 1980 the Arson Strike Force plans to gain access to these systems via their own computer terminals. The ability to retrieve information pertinent to arson investigators will be tested. An instructional manual regarding this retrieval procedure will be developed and efforts will be initiated to train investigators and prosecutors in retrieval. By 1981, the Strike Force plans to have investigators and prosecutors accessing the information base through computer terminals located at the latter's own offices.

As part of the Arson Analysis and Prevention project, an arson prediction index is being developed. Work on this specific program has focused on a set of tasks that need to be accomplished.

Task 1 in the arson prediction program involves the identification of variables which may be useful in predicting the level of arson risk. Along with the identification of these variables, the Strike Force is compiling a list of sources from which information on these variables can be obtained. The variables are divided into two groups—"building-related" and "neighborhood." Listed below are some examples of the variables and corresponding sources developed by the Strike Force to date.

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building code violations (residential)</td>
<td>Violations File--Housing Preservation and Development Dept.</td>
</tr>
<tr>
<td>Building Vacancy</td>
<td>Vacant Building Survey File--Dept. of City Planning</td>
</tr>
<tr>
<td>Occupancy Rate (residential)</td>
<td>Con Edison File--Dept. of City Planning</td>
</tr>
<tr>
<td>Tax Arrearage (number of quarters in arrearage and dollar amounts)</td>
<td>Tax Arrears File--Finance Dept.</td>
</tr>
</tbody>
</table>
II. Neighborhood Income

Race

Age Distribution

Task 2 is designed to computerize data on arson fires occurring from June 1977 to June 1979. The Strike Force took city fire marshal investigation reports of fires for this time period, then coded and keypunched information concerning the fire address, owner's name, date of fire, etc. Approximately 15,000 reports were keypunched by the end of 1979. This data base on arson fires will be used as the dependent variable in a statistical analysis to determine building and owner characteristics associated with arson.

Task 3 will involve selection of all of the buildings with determined arson fires (estimated at 9,000 out of the 15,000 data base). A random sample of 9,000 buildings experiencing no arson fires will then be selected to be matched with the sample of arson buildings.

The next task will involve the use of statistical analysis on the data file to determine those building and owner characteristics most associated with arson fires. The building-related variables mentioned earlier will be analyzed for arson and no-arson buildings. It is expected that several variables will emerge as arson predictors based on their unique correlation with arson buildings vis-a-vis non-arson buildings.

A corresponding, but separate, task will focus on neighborhood factors associated with arson risk. Census tracts will be ranked according to arson risk based on the occurrence of arson (or fires in general) per building, per population, or in absolute numbers. For example, the number of fires in a census tract area can be determined from battalion chiefs' reports. The number of arsons is obtained from files of the city fire marshal's office. This level of neighborhood arson risk will be the dependent variable and will be statistically analyzed vis-a-vis the neighborhood variables mentioned above. The result expected is that certain key neighborhood variables will be associated with high arson risk.

The final task of the prediction program will attempt to formulate two arson prediction indices—one for buildings and one for neighborhoods. Calibrated levels of risk using both indices will be developed. Each building will then be assigned a relative risk ranking. For instance, a "low-risk" building in a "high-risk" neighborhood may be placed at a higher risk level than a "low-risk" building in a "low-risk" neighborhood.

The landlord contact program is being implemented as a separate but related effort. The program is intended to utilize the arson prediction index. Privately owned buildings indicated as "high-risk" property would be targeted for a set of proactive measures. Specifically, four fire marshals will be assigned the task of contacting the landlords of these "high-risk" properties. Working in two-man teams, the marshals will visit the landlord (by scheduled appointment whenever possible) and explain the unsafe conditions of the property, the low-cost opportunities for property improvements, and the legal ramifications if the property remains neglected and unsafe.

A listing of these "high-risk" properties will go to other city agencies involved in housing and safety code regulation. Post-fire investigations will utilize the landlord-contact information by allowing immediate dispatch of an arson investigator to buildings previously "flagged" by the fire marshals.

C. Resources Required

1. Staffing. The Arson Analysis and Prevention project staff consists of a coordinator, an assistant, a director of research, and a computer programmer. The Information Analysis project staff consists of a project director, a statistical analyst, a research assistant, and a secretary.
The landlord contact proposal requests funding for the following positions: project director, research assistant, four fire marshals, and a secretary.

2. Funding. The Arson Analysis and Prevention project is funded for $107,320 as part of one LEAA grant. The Information Analysis project is funded for $195,900 as part of another LEAA grant. The landlord contact program has requested funding for $226,000 from the Aetna Life and Casualty Company.

3. Equipment. The data processing equipment required for development of the Strike Force projects is available through the New York City Computer Service Center.

III. Boston: Arson Early Warning System (AEWS)

A. Background

The Boston AEWS System was developed following an investigation into an organized arson ring which operated in the Symphony Road area of the city. The ring was involved in dozens of fires during a period from 1974 to 1977. Following the deaths of several tenants in arson fires within a short time span, the residents formed a group (Symphony Tenants Organizing Project) to combat the problem. Since it appeared that certain characteristics of buildings became manifest prior to arson fires, the Symphony Road group felt that an arson prediction system could be created to prevent arson fires. A decision was made to undertake a pilot study, conducted by Urban Educational Systems, Inc. (UES) of Boston. UES received a grant from the U.S. Fire Administration to develop an arson early warning system. The study is underway, with preliminary results expected in 1980. Three manuals have been produced thus far by UES growing out of their work on this project.


B. Purpose of the System

The arson prediction system is expected to identify, with considerable certainty, which buildings are most prone to arson fires. This information will be used to initiate a variety of arson preventive measures; such as, enforcement of building codes, reduction in overinsurance of property, promotion of neighborhood awareness, and proactive investigation by law enforcement agencies.

Like the New Haven and New York City AIM systems, the Boston AEWS is expected to serve as both a data collection system and an arson prediction system. Information from city agencies pertaining to building or owner characteristics will be collected and made accessible in a more efficient manner. This will aid investigative and prosecutive efforts in a post-fire search for arson evidence, in the event that an arson fire is not prevented.

C. How the System Works

The AEWS study selected 78 residential, absentee-owned, multi-unit rental buildings in the Boston area as their sample population. Two additional requirements had to be met by these buildings for their inclusion in the sample: (1) they had to have sustained a fire loss of more than $500 between 6/1/78 and 5/31/79, and (2) the fire had to be classified as incendiary, suspicious, or a fire that caused abandonment. The 78 burned buildings were matched with a control sample of 78 buildings that had not experienced a fire in the same time period.

Historical differences between these two sample groups over a 10-year period were determined on the basis of over 300 variables. Information pertaining to each of these variables was collected for each building.
Early results from the analysis suggest that combinations of as many as a dozen variables will be the best indicators of high arson risk. Variables will be assigned relative weights depending on their relative correlation with past arson fires.

The variables to be examined are divided into two categories: (1) economic stress factors of the building, and (2) characteristics of the owner. The economic stress factors of the building include such items as: vacancy rates, debt-to-equity ratio, sales and resale transactions, previous fire record, building code violations, sanitary code violations, tax arrearage, liens, attachments, information from rent control administration records, and time lag between building citations and repairs. The owner's characteristics include such factors as: previous fire record, owner's associates, rent control records, housing code violations, records on the owner's other property, and the owner's financial status. In many cases a distinct separation between economic stress factors and owner-characteristic factors is not possible. (For example, code violations and tax arrearage bear on both.) At this point in the development of AEWS, all of the owner-characteristic factors except previous fire record have been temporarily set aside in the analysis, pending completion at a later phase of the study.

D. Implementation, Testing, and Evaluation

The process of collecting the building and ownership information is presently underway in Boston. The AEWS staff expects the results of their statistical analysis in mid-1980.

E. Resources Required

1. Staff and Equipment. The staffing required for this study is provided by Urban Educational Systems, Inc. A total of three staff members are presently assigned to the AEWS study, including two computer specialists (one full-time, one half-time), one researcher, and an administrative assistant (half-time).

2. Funding. Funding for the AEWS study is from a grant of $200,000 made to UES by the U.S. Fire Administration. Approximately one-half of this grant is devoted to research purposes, with the other half allocated to providing technical assistance to other communities throughout the nation.

For further information, contact:
Urban Educational Systems
120 Milk Street
Boston, MA 02110
(617) 482-4477

IV. Phoenix: Arson Prevention and Analysis Unit (APAU)

A. Background

The Phoenix program is managed by the Arson Prevention and Analysis Unit (APAU) in the Phoenix Fire Department. Various kinds of information which are presently located in separate local agencies (and which have been analyzed by the individual agencies) will be collected and analyzed together by the Arson Prevention and Analysis Project.

The APAU project will serve three general purposes:

- Output from the analysis of data will be distributed to a variety of agencies, thus each agency will have access to the information generated by the other agencies.
- The data analysis will indicate patterns of arson incidence in the Phoenix area which will facilitate deployment of arson investigative personnel.
- Information provided as a result of the data analysis will assist in joint planning of strategies among the various Phoenix agencies involved, including the police and fire departments, private insurance companies, county prosecutor's office, the arson task force, city manager's office, city council, the chamber of commerce, and other civic groups.

B. How the System Works

The Phoenix AIMS staff is developing new record-keeping forms for arson investigations done in the city. Presently, arson investigations in Phoenix are conducted by the Fire Department (Fire Investigation Squad) and the Police Department
(Bomb and Arson Squad). Both units will be provided with the improved data collection forms. These forms will be used to establish several files including an "Arson Location" file, an "Arson Suspect/Victim Investigation Lead" file, a "Property Management" file, and a "Fire Dollar Loss Reported" file.

In addition to the information collected through the use of the above forms, other information will be gathered from other agencies. Information will be received from various insurance companies, and from the Property Insurance Loss Register (PILR), relating to insurance loss. City departments such as Zoning, Parks and Recreation, and Public Housing will also take part in the data collection.

The information received from these various sources will be programmed, coded, and entered into a word processor. Use of the word processor will allow rapid retrieval of requested information under various specific categories. Multiple listed information (e.g., an owner's name under "previous fires," "housing code violations" and "insurance claim files") will enhance inter-agency cooperation and provide assistance in arson investigations.

Factor analysis, cluster analysis, and discriminant analysis of the data base will provide information on arson incidence patterns. It is anticipated that trend analyses of these incidence patterns will allow prediction of arson-prone areas in the Phoenix metropolitan area. Unlike the New Haven and Boston AIM systems, the Phoenix model does not attempt to predict the risk level of specific owners or buildings, but instead focuses on geographic areas. Information on owners and buildings is collected, and priorities are set for fire prevention.

C. Implementation and Evaluation

The "output" of the Phoenix AIM system will be distributed to a wide range of potential users. Police and fire units will utilize it for arson investigations (e.g., intelligence operations, surveillance decisions, property loss information retrieval, etc.). The Arson Task Force will use the information as a basis for community outreach programs, legislative lobbying efforts, and as a mechanism to inform the mass media. Other recipients of the "output" will include insurance companies, civic groups, the city council and mayor's office, and other law enforcement agencies.

Specific evaluation of the impact on prosecution of arson cases, the utilization of manpower, the effects on insurance claims, and the flow of information will also be done.

D. Resources Required

1. Staffing. Staffing will be provided by the use of existing personnel in the Fire Department Arson Investigation Unit and Police Department Bomb and Arson Squad. Operation of the AIM system will be handled by the Program Analyst who works for the Arson Prevention and Analysis Unit.

2. Funding. The project is funded under a U.S. Fire Administration grant of approximately $20,000, which is used to support the Program Analyst.

3. Equipment. The word processor and other equipment necessary for the information analysis are supplied by the Arson Investigation Unit of the Fire Department.

For further information, contact:

Phoenix Fire Department
620 West Washington
Phoenix, AZ 85003
(602) 262-6397
# ENFORCEMENT MANUAL:

## Approaches for Combatting Arson-for-Profit Schemes

### Volume II:

**Tactical Guides**

**Edited by:**
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- James Greenfield

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**Law Enforcement Assistance Administration**

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INTRODUCTION

The tactical guides which make up this second part of the manual are designed to provide assistance with specific operational questions. It is intended that Part II be used in conjunction with the strategy discussion in Part I, following careful reading and analysis of that part. In this manner, both Parts I and II will complement each other to the maximum extent possible. The investigator will be able to logically move from planning to action, and from the office to the field, as background and strategy development precede (as they should) the next vital step of active criminal investigation.

Clifford L. Karchmer
Project Director
Record Searches and Document Checks in Arson-for-Profit Investigations

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Introduction

An enormous number of arson investigations in this country are dropped, shelved, or simply run out of gas for lack of information. One reason is that many investigations are incomplete; they lack any attempt to obtain potentially significant documentary information. Investigators generally do not conduct extensive research because they do not know where to go, what to look for, or how to interpret what might be available. Similarly, prosecutors in most states are often unaware of most relevant research sources; such information is seldom taught in law schools.

Documentary research should be conducted routinely in any case of a suspicious/incendiary fire where there is a good suspicion of a financial motive. A knowledgeable investigative researcher can usually conduct most of the important research checks on any given loss in one day, sometimes within a few hours. The ability to do research quickly and thoroughly comes only with practice; ideally, someone who knows the sources and procedures should be delegated to train assistants who show an interest in research. The best investigative researchers are generally college graduates who have had to conduct some sort of concerted research efforts to complete papers and who have the patience to work methodically. This sort of work, done long enough, becomes a sort of education in itself. Good investigative researchers become adept at understanding the economic forces that motivate arson-for-profit.

The main goal of investigative research is uncovering indications of financial motive for an arson fire. At the same time, however, there must be an understanding of the importance of recognizing significant connections between individuals and organizations as they may appear "on paper." Such documents are extremely important when an arson case is prosecuted as a joint venture between various individuals, especially an owner and a mortgagee. Perhaps more importantly, such documents can supply day-to-day leads to help with questioning of any knowledgeable sources.

This manual attempts to explain the procedures for conducting research relevant to arson-for-profit. It should not be considered the "ultimate" text on the subject, but more as a training aid. Like most aspects of investigation, research can be learned well only by doing a lot of it.
I. RESEARCH OF PUBLIC DOCUMENTS

A. Determining Property Ownership

Background research into an arson fire normally begins with determining the owner of the property. The most common source for this information is the local tax assessor's office, which is informed of all property transfers by the county or town land records office. Assessor’s records are sometimes a few months out of date; however, they do provide an accurate starting point—the name of the most recently assessed owner of any given property.

Many assessor offices maintain two separate files—one for public use, and a tax card file for internal recording procedures. The tax card, which is considered a public document in most states, is the more useful because it contains an index to the most recent property as recorded at the local land records office. Additionally, it generally contains: valuations of land, building, and any “appurtenant structures” (garage, pool, etc.); the current real estate tax assessed to the owner; the land area of the property; previous owners (by name, with sale dates and reference numbers); and sometimes any municipal liens on the property. All of this information should be noted.

While researching a particular property, the investigator should consider obtaining the addresses of other properties assessed to the same owner; this information is usually available in the public search file. The file will not show any property sold before the latest date of assessment, but it could be useful some time later on if it develops that the owner is “fire-prone.”

Check to see if the owner applied for an abatement of his taxes, especially within a year of a loss at the property. If he did, check the application for the reasons he gave and what action was taken. Finally, a local assessor’s office may have records of taxes levied on personal property and on motor vehicles; both files should be examined for information regarding the subject and his assets. Other possibilities for determining property ownership on a local level are (where they exist) the local water/sewer commission, redevelopment or planning agency, and the engineer’s office.

At this point the investigator has the choice of checking municipal records for other sorts of information (violations of building, sanitary, or rent control regulations, etc.)—as will be discussed here—throughly examining land records. These will be located in either the town or city clerk’s office or the county registry of deeds—depending on the state. Checking land records at this time will show any change of ownership since the latest assessment date, and therefore the identity of the owner at the time of the fire.

In different states there are different ways of indexing property transactions. The two most common are the tract or plot system, in which records are filed by location (street address, etc.), and the grantor/grantee system, in which the cross-referenced in grantor and grantee index books. The grantor index shows the names of property buyers and mortgage borrowers. The grantor index shows the names of property sellers and mortgage lenders. It also references any other instruments that affect an owner’s interest in a given property.

Instruments are listed in the two index books by book and page numbers, which correspond to numbered pages in sequentially numbered record books. Once the deed to a property is located, either by the book and page reference property as recorded in the local land records office, the investigator must look at the index books under the buyer’s name—the investigator must look for references to any later instruments that may affect that property. This is accomplished by looking at the grantor index, under the owner’s name, for the same year in which the sale took place, then looking at every succeeding year in which the sale took place, then looking at every succeeding year in which the sale took place. Transactions for the grantor index book up to the present time. Transactions for the current year are often referenced on file cards.

The investigator must look for instruments filed in connection with the specific property he is researching, which is identified in the “Description” column in each index book. Other information (similar to that shown on deeds, with the exception of excise stamps affixed to the deed, name of the notary, and both signing and recording dates of the deed. Note that the signing and recording dates of the deed should be the same as listed at the assessor’s office.

After the deed has been checked, all other documents found in the index should be checked, in chronological order. Pay particular attention to mortgages. Copy all relevant information (similar to that shown on deeds, with the exception of excise stamps, which appear only on deeds.) See the Appendix for an explanation of other relevant instruments filed at land records offices.

Using various land record indexes, an investigator can trace the history of all the property of any given owner within the same town or county. In that connection the investigator will be able to determine the current owner of the property.
must find out if there is more than one section of the land records on file. In Massachusetts (and in more than a dozen other states) there is a Registered Land Division of the Registry of Deeds. In this simplified system, all property transactions are keyed to certificates of title, on the back side of which is recorded an abstract of all documents relating to each owner's title to that property. The Registered Land Division, however, is entirely separate from the regular recording section; once land is registered (by petition to the County Land Court) it is seldom if ever referred to in the recording section. Registered land indexing is done differently, but clerks are usually available to provide assistance.

B. Information on Individuals

In a properly conducted arson investigation, the tenants (residential or commercial) of the loss building should be interviewed. Commercial tenants are usually easily located. In a residential building this may be a problem, especially if the fire drove them out and forced them to relocate. The scene investigator should look for names on mailboxes, and the landlord should be asked for a tenant list. If the tenants have relocated, the investigator should look for forwarding addresses at the local post office. To verify the tenants' names or to locate recent former tenants, the investigator should check the records of the local voter registration office, usually located in the town hall. This office publishes, by address, the information obtained from the annual police census: usually names, sex, political parties, year of birth, and occupation. Occasionally there will be a separate but similar list on file at the city or town clerk's office. Larger municipalities may have a city directory (such as R.L. Polk's—a one of the most useful research sources available) that shows the tenants at each address. Finally, the state Motor Vehicle Registry may produce detailed information on tenants or other relevant individuals. In states such as Massachusetts, where motor vehicle records are public, information about drivers' licenses can be obtained: address, height, weight, date of birth, SSAN, and any restrictions involving eyeglasses. Information about vehicles registered to any given individual can also be obtained.

Other general sources of information on people may provide assistance to the investigator. One important source is the county registry of probate. Probate records include: records of deaths (look for wills, naming next of kin, and the inventory of estate showing a schedule of real and personal property), divorces (occasionally showing the defendant's sources of income), conservatorships (the appointment of someone to oversee estate property), and guardianships (the appointment of someone to manage the affairs of a person—minor child, handicapped person, or mentally incompetent person).

The state or county office of vital statistics can provide records of births, marriages, and deaths. Probate records, if this office can sometimes provide relevant connections between related individuals.

At a point in an investigation when the identity of the relevant individuals to the case is known, each name should probably be checked in court and probation records. Criminal arrest records are normally maintained by a county or local board of probation, or occasionally in police department files. These records, however, are almost never open to public scrutiny. They can sometimes be obtained by police or district attorney's offices; in other cases they are available only on subpoena. Court cases are often more easily obtained from both local (district or municipal) and higher (superior or appellate) courts. Civil and (where they are open to the public) criminal cases should be checked for all names relevant to the case. If a name is found in the alphabetized card file for either plaintiffs or defendants, the docket number should be noted and requested (a docket is a case summary.) If the particular docket seems worth pursuing, the case file should be requested; this will show all motions, decisions, and the transcript of the trial. These records can reveal much about people and should be read carefully. Similarly, records of U.S. district courts are open to the public, though these courts are normally located only in larger cities. The index file system in federal courts is the same. Also located in U.S. district courts is the bankruptcy court. Since many land record offices maintain a card file listing the names of people and institutions that have filed for bankruptcy, there is only a need to go to that source when a relevant name has been listed in the card file. The case file should be requested by number. The most relevant information is often the listings of assets and liabilities and the schedule of creditors, some of whom may be likely subjects for interviews.

C. Researching the Building

The researcher should attempt to find out as much as possible about the fire loss building and how the owner (and tenants) dealt with it. The municipal building department is usually the starting point. This agency is charged with enforcing the local or state structural code and any statutes or regulations dealing with legal occupancy of buildings. Most such departments file information by address. Look in the appropriate file for any of the following: applications for permits (including description of work proposed, estimated cost, names of applicant and contractor), permits themselves (which usually show whether or not the work was completed), and notices and proceedings concerning structure, equipment, heating, plumbing, sprinklers, gas units, elevators, and occupancy. Any indication of court action on any such violation should be
noted and the appropriate court record examined. In some
cities, information about property occupancy and usage is filed
to see if the owner of the property under investigation applied
reasons for the application and the board's ruling should be
researched for any indication of local or state sanitary code
violations. (Note that some cities have a separate housing
inspection agency which deals only with residential property.)
Most boards of health operate "passively," they inspect in
significant information, particularly if they reveal the
response to complaints. Their records, however, can produce
existence of lead paint violations (often an extremely
expensive situation to correct). As with building department
records, look for any violations cited shortly before the fire
were fully corrected. A source of information on commercial
properties that is often overlooked is the local fire office, which routinely inspects commercial and
public buildings to insure that they are within the standards
may prove to be relevant.

Rent control agencies, where they exist, maintain files
that are frequently of interest. Besides determining rent
ceilings, the agencies normally have information on hearings,
appeals, and evictions connected with any address that is under
register late or not at all. Occasionally there will be
references to court cases, particularly illegal evictions.

D. Examining Financial Records

There are two local agencies that can produce limited
information about a property owner's financial situation. The
tax delinquency on any property. This information by
itself, however, has doubtful value as an indicator of the motive
for a fire, especially in states where towns and cities have
the legal right to satisfy tax liens from insurance settlements.

The Uniform Commercial Code (commonly called UCC) file,
records on chattel mortgages—loans secured by personal, or
moveable, property. This can be anything from an auto or boat
loan to the pledging of all furniture, fixtures, equipment,
mortgage. All material is indexed by the debtor's name. The
secured party and the item(s) covered should also be noted. The
file may also be found in a secretary of state's office,
where copies of chattel mortgages, or financing statements,
from throughout the state would be recorded.

A municipal city clerk's office may also have a file of
business certificates, or a "D/B/A" (Doing Business As) file. A
certificate is supposed to be filed, in most states, by any
business or company trading under anything other than the name of
the operator (though corporations are not usually required to
file). Note that a large number of such businesses never file.

All states keep records of corporations, both profit-making
and non-profit. These records are often filed with the
secretary of state's office. Generally, when a corporation
forms a must fill incorporation papers ("Articles of
Incorporation," etc.), which show names and addresses of
incorporators, officers, and directors; principal business
address of the corporation; purpose for which formed; shares of
stock authorized; and date of annual meeting. Additionally,
corporations are normally required to file some sort of annual
report, which shows any changes of officers, directors, or
primary business address, and which may show (depending on the
state) a certified balance sheet that lists liabilities. Systems for indexing and researching vary widely
from state to state. Additionally, a secretary of state's
office will probably maintain records on partnerships and
corporate trusts (realty trusts that issue shares of the
business and operate like corporations). Records on these
organizations normally consist only of original filing paper
and annual reports. The most relevant information available on
either is the names of the principals involved.

When a loss occurs at a property where alcoholic beverages
were sold, the liquor license information should be checked. The
municipal licensing board should have on file the latest
application for a license or for renewal of any existing
license. The information on both documents is usually
extensive regarding the ownership and management interest in
the license and the premises. In particular, the names of
those individuals should be noted. Often, the original
application for license will have extensive information on the
manager of the establishment and on the purchase and financing
of the business and the license (and, when the licensee owns
the building itself, of that also). Any complaints,
vioations, or notices of hearings should be noted.

State liquor control commissions often have the same
information as local licensing boards, and they may allow
greater public access to the information. They may also keep
information for a longer period than the local board. In
addition, the state commission is likely to maintain a file on
names of retailers who are delinquent in payment to wholesalers
or distributors. In most states a retailer may not purchase
alcoholic beverages for resale from another retailer—only from
a wholesaler. This situation wholesalers are obliged to
report the names of delinquent customers. If the delinquency
First problem is often identifying the insurer of one or more properties of a given owner that have sustained losses. The owner or his insurance agent could be asked for this information, providing that he is legally obliged to reveal the information, and that the investigator will not be "tipping his hand" by asking for it. There is occasionally an outside chance that the owner insures his automobile with the same company that covers his real estate; records of the state motor vehicle registry may identify that company.

A slightly better source is old fire records, which might show the insurer. Fire department, arson squad, and state fire marshal's office files should be checked. The final means is making inquiries of possible insurers, the state FAIR plan in urban, inner-city areas, especially. In the special case of an individual or institution that is under investigation for a number of fires, the surest way to obtain insurance information is to summon the owner--with all records pertaining to the various properties--before an investigative grand jury. If it is known that the owner always used one particular insurance agent or public fire adjuster, those individuals should also be summoned.

When the insurer is known, the company's claims department will normally provide whatever information it may legally release to appropriate users: law enforcement agencies, private investigation firms, municipal officials, etc.

A claim file will be created only after a loss is reported. The first item in this file is often the notification of loss. This is usually followed by one or more reports by the claims adjuster, an employee of or someone hired by the company to determine the amount of loss or damage. His reports will contain the basic facts about the loss, notes of meetings with the insured or his (public) adjuster, description of the damage and adjustment figures, and any material submitted to him by the insured in support of the claim. There will sometimes be a non-waiver agreement in the claim file. This is a sort of stipulation between insurer and insured that any investigation conducted into the loss does not invalidate the insurability of either insurer or insured under the terms of the policy. Often there will be a sworn proof of loss in the file. This, signed by the insured under penalty of perjury, states the amount of loss (normally, as agreed upon by the company and public adjusters), the cause of loss, and a statement that the insured did not in any way cause the loss. Occasionally there will be fire and/or arson squad reports or private investigation reports in the file. Note: Most insurance companies file their underwriting information by property address, not by the name of the insured. Some companies, such as Aetna--at least until recently--file information by policy number, making it all but impossible to get any kind of information without that number.
III. ANALYSIS OF RESEARCH INFORMATION

Collection and analysis of information in an arson investigation are not mutually exclusive tasks. Every time a new piece of information is obtained it must be considered in relation to everything else that is known about the case. There must be a determination of the limits of each investigation: "How far does this case go? Is this an isolated case of arson? Has the owner had more than a single incendiary fire? Who else is involved, in this case and, perhaps, in a variety of fires the owner has sustained or been involved in?" These are some of the questions that should be constantly in the minds of the investigators and prosecutors. There is a really blatant disregard among many arson investigators for a really thorough going-over. Uncovering a pattern of many losses by so many people involved in a single loss is valuable in itself, simply because it creates (or should create) an impetus to do more about the situation.

A. Beginning an Arson Analysis

The obvious point to begin analysis of an incendiary fire is to determine who had a motive to set the fire. The most usual choice is the insured/owner, but not often the only choice. When the possible subjects are selected, there must be a review of everything known about them and their relation to the loss property. This includes the financial condition of all parties (from interviews, observations, land records, tax and UCC material, court cases, and if available, credit checks); condition of the loss property (from the same sources, plus building department, health/housing department, rent control board, insurance inspection reports); involvement of any of the parties in previous suspicious fires or in general criminal activity (from a combination of land records and fire reports, court cases, and arrest records, if available). Documents should be studied "as they occurred"--in chronological order.

When all this information is at hand and has been examined with some care, there should be an appraisal of any inconsistencies, whether regarding origin of the fire, opportunity to set it, or possible financial motive for it. If there is good reason to think that a particular fire is arson-for-profit, there should be an equally good reason to think that if the arson did not occur, the unburned property would present a loss to someone. The limited amount of help can be given by books and manuals such as this, but there is no substitute for doing the work itself. Above all, there must be a shared belief by all participants in an arson investigation that their efforts are worthwhile, and that cases can be won on the strength of good research.

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profit. The chief problems here are vacancies (for whatever reason), rent rollbacks (determined by a rent control board, usually for over-charging in the first place), "stolen rents" by a third-party rent collector, and rent withholdings.

Typical property expenses are: mortgage payments, insurance premiums, real estate taxes, utility costs (heat, electricity, gas, and water--where the tenants do not have to pay these), normal maintenance or janitorial services, and repairs. These are also the priorities, in order, of the owner's expense payments. Anything that increases expenses decreases profits. Normally the one expense that can most seriously affect a property's net income is repairs. Although good maintenance tends to keep unexpected repairs to a minimum, there are many landlords who are extremely conscientious about maintenance. There are also a great number of owners who are naive enough to ignore the possibility that heating, plumbing, and electrical systems may not last forever.

There are ways of dealing with short-term profit problems, most notable of which is refinancing of a mortgage to reduce the monthly payment or to provide extra money for repairs or both. Repairs can also be dealt with through home improvement loans. There are also ways to raise rents legally and equitably. These and other methods can often turn short-term problems into long-term profits. People who burn their properties, however, are not interested in "long-term" solutions to financial problems; they are interested in short-term, immediate profits: "sell it to the insurance company. The owner/arsonist's major financial problems may not even be directly related to the property that burns, but that property is very likely not in the best of condition.

Notices of violations (structural, sanitary, rent control, etc.) are often critical indicators of a property's condition. Such violations should be considered in relation to other facts: did the fire occur shortly after violations were reported (or shortly after mortgage or tax foreclosure proceedings)? Were permits ever taken out to correct violations? Was additional financing obtained to pay for repair work? Or, if financing was obtained, was there an application for a permit to do work? Did the insured recently receive a notice of insurance cancellation? Was he being sued about a matter not even related to the building?

The ability to analyze the sort of information noted above comes only with experience. The limited amount of help can be given by books and manuals such as this, but there is no substitute for doing the work itself. Above all, there must be a shared belief by all participants in an arson investigation that their efforts are worthwhile, and that cases can be won on the strength of good research.
B. Serious Financial Problems as a Motive for Arson

At various stages of research an investigator may find indications of apparent financial problems for the owner/insured, tenant, mortgagee, or other financially interested party. Any such indication should be explored thoroughly, by means of other relevant public- or private records and by interviews of knowledgeable sources. Occasionally, serious problems will be discovered in the finances of an interested party or in the balance sheet of the loss property itself. When this happens, the documentation of such problems must be thorough, as they may constitute the criminal motive for the loss. The following are examples of serious problems and possible actions that may be taken in exploring them:

1. Bankruptcy. If a suspicious fire occurs at a property whose owner is in bankruptcy, consider where the fire originated. If the origin is near where the owner kept financial records (and especially if the owner claims that such records were destroyed), the fire may have served a dual purpose: to keep those records from scrutiny and to obtain an insurance settlement that may exceed the value of the property. The court file will list the bankrupt's creditors; they should all be interviewed to determine any unusual patterns of business before the fire and to learn of any suspicions of each creditor about the debtor and his dealings. Tax returns of the debtor (the individual and, if appropriate, the business itself) should be obtained through subpoea and compared with the financial information in the bankruptcy file. If the loss occurred at a business, it may be advisable to obtain a search warrant as quickly as possible to determine if any contents claimed to have been destroyed were really present at the loss location.

2. Imminent Foreclosure on the Loss Property. A property owner will occasionally try to salvage the "last gasp" of value from a property that is due to be foreclosed for default of mortgage or tax payments. This sort of problem will be revealed by a check of land records. Upon finding this situation, the investigator should attempt to study records of all the owner's other property to determine whether the owner's other property is in similar "jeopardy" and whether the owner has had prior fires at any of his properties. If the owner's mortgage is being foreclosed, that may be the reason whether the owner's other property is in similar "jeopardy" and whether the owner has had prior fires at any of his properties. If the owner's mortgage is being foreclosed, that may be the reason for the fire. An attempt should be made to learn if the owner was being threatened with the loss property, through interviews of his tenants, neighbors, and associates, and possibly by obtaining his income and other tax returns for the last few years. The owner's alibi for the time of the fire should be checked carefully. His associates should be checked by means of interviews and examination of court records.

3. Condemnation Order/Notice of Major Repairs. Problems directly affecting a property will usually be discovered in building or health department records. If there is an existing mortgage on the building, the mortgagee should be interviewed to find if the owner was recently denied a request to refinance. Tenants (if any) should be asked if anyone recently tried to get them to move from the building. (Note that tenants should usually be asked this question in the event of a suspicious loss where the owner stands to gain through insurance.) Land records must be checked to learn of any other property the owner holds that property should then be checked for both condition and prior losses. It may be worthwhile to interview former tenants and neighbors for any unusual listing of structural or sanitary deficiencies in the building (and perhaps with the assistance of a contractor or appraiser) determine the probable cost of repairs. The owner may have done this himself-if the cost of repairs exceeded the market value of the property, the probable motive for the fire becomes immediately clear. In urban properties that deteriorate badly and then burn, it may be worthwhile to consider if such a property is in or near an urban renewal area. If so, the land on which the building sits is probably more valuable without the building, and the owner has a dual motive for a fire: a good insurance payout followed by profitable sale of the property by a developer. Look for other severe fires nearby-the idea may have caught on with several other owners. Consider also that a mortgagee may be involved in such a scheme, often in league with the owner-look for a mortgage granted shortly before the fire. Ask to see or arrange to subpoena the promissory note that the mortgage secures; look for usurious interest or any indication that the full amount of the mortgage is much higher than the land and building. In this sort of problem, where both fire and mortgage are involved, try to get from the mortgagee any documentation of a financial background check on the borrower or a financial statement submitted by him to the lender; be suspicious of the mortgagee if neither of these can be produced. If either is available, compare it with any financial information obtained from the borrower, such as tax returns, income or operating statement, etc., and look for discrepancies.

4. Prolonged or High Rate of Vacancy. Information about vacancies usually comes from tenants, neighbors, or a building superintendent. In this case the property's income statement should be obtained by requesting it or getting it on subpoena from the owner or manager. Lack of rental income can be ruinous to a property owner; it is often combined with poor
sanitary conditions or lack of heat, electricity, gas, plumbing facilities, etc. The investigator should try to find out if the owner, manager, or rental agent made any serious attempt to get new tenants in the months preceding the loss (by signs, newspaper ads, etc.). Additionally, any existing tenants should be asked if any attempt to evict them was made before the fire.

5. Imminent Cancellation of Insurance. Cancellation of insurance usually occurs for one of two reasons: non-payment of premium or the discovery of substandard physical conditions by an inspector. The former almost automatically points to financial problems for the insured; this should be explored thoroughly by the various means noted above. The latter reason suggests that the insured is not putting money into building maintenance. Tenants (if any) should be interviewed to determine if there were any major code violations at the property and for how long they existed. Code inspection records may also be helpful in this regard.

6. Expensive Legal Judgment Against an Insured. If a losing defendant in a civil suit has to come up with a sudden large sum of money to satisfy a legal judgment, he may panic into burning an insured property to obtain the money. This includes divorce cases. Information about such a judgment might come from a variety of sources: tenants, family members, neighbors, friends, suppliers, etc. The amount of indebtedness and other facts relevant to the legal case can be obtained from the court case file.

C. Absence of Financial Stress

1. When Financial Problems Seem Small or Non-existent. Frequently, the most difficult incendiary fires to investigate are those where all or most of the following seem to apply:

- Acceptable tenants who pay rent on time;
- No long-term lease problems;
- Stable neighborhood, properties increasing in value;
- Good wiring, plumbing, and heating in building (and good roof);
- No (or few) sanitary code violations;
- No mortgage defaults;
- No tax delinquency;
- Owner has no evident personal financial problems.

In such cases the investigator may conclude that the fire was not set for profit. The following possibilities should, however, be considered first:

1. "Stop-Loss" Arson. Fires are sometimes set to collect insurance in order to deal with potential financial problems. An insured may face a personal or business loss that would cripple him financially. Such a loss may involve the property itself (especially structural problems not detected by an inspection—tenants or contractors may know about these) or, more likely, something other than the property. Problems with bad investments, gambling, loan sharks, and uninsured theft losses or medical bills should all be considered. Various sources noted above (regarding serious financial problems) should be examined. A somewhat refined form of stop-loss arson involves a recently refinanced mortgage, when the borrower decides he cannot—or will not—make mortgage payments. The borrower has already gotten a chunk of tax-free money (from the refinancing) and caps it off with a tax-free insurance.

2. Re-use of the Land. An owner may find that he could be making far more money from his property if there was a different type of structure on it or if the usage of the existing structure could be altered. The most common motive currently in the latter case is conversion of apartments or commercial space to condominiums. Again, try the sources listed for serious financial problems, plus local realtors.

3. Other Financially Interested Party. Tenants (especially commercial ones) may have a strong insurable interest in a property; their financial backgrounds should be examined. Mortgagees may have a strong motive—often a need for immediate cash. A financial reporting service or records of the state banking commission may provide pertinent information. Additionally, the mortgagee's financial records might be subpoenaed. If there is any suspicion of mortgagee involvement in an incendiary fire, the promissory note that the mortgage secures should be obtained. If the interest rate is usurious (which, in states such as Massachusetts, is legal if the lender notifies the state that he charges a higher-than-legally-allowable amount of interest), there is a fairly good possibility the borrower and the lender conspired to have the mortgaged property burned (normally for quick cash).

D. Detecting Hidden Ownership of Property

Hidden or disguised ownership of property may never be uncovered through public records. It is more often disclosed by private papers. It is also a very "grey" area; in most states it is legal in one way or another to disguise financial
interest in real estate. Even reputable people in the business often advise young investors to hold rental property through a "straw" owner as a means of limiting financial liability. Large-scale property owners often use straws to reduce their tax debt. Some people simply have an extreme sense of privacy.

Disguised ownership or its likelihood, though not always a suspicious situation, should never be ignored. Knowledge of it may change a "possible vandalism" or "incendiary by persons unknown" loss into an obvious arson-for-profit scheme.

Almost anyone can be a straw owner. The principal witness (an admitted contract arsonist) in the Massachusetts Attorney General's 1978 series of arson prosecutions used at least four different ones: his wife, two employees, and a "phantom"—a non-existent person. A lawyer convicted in one of the same cases went one step farther: he used a straw mortgagee, an employee who turned over the proceeds of an insurance settlement to the lawyer, apparently for a small fee. Straws may be relatives, prior or later owners of loss properties, employers, lawyers, mortgagees, stockholders, etc.

The following is a Letter/Number Checklist of possible straws and sources that may reveal them:*  

<table>
<thead>
<tr>
<th>Letter</th>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Relatives:</td>
<td>9, 12-15</td>
<td></td>
</tr>
<tr>
<td>B. Friends:</td>
<td>2, 4-9</td>
<td></td>
</tr>
<tr>
<td>C. Business Associates:</td>
<td>2, 4-9</td>
<td></td>
</tr>
<tr>
<td>D. Trust Beneficiary:</td>
<td>4-9</td>
<td></td>
</tr>
<tr>
<td>E. Mortgagee:</td>
<td>4, 5, 6, 8-11</td>
<td></td>
</tr>
<tr>
<td>F. Corporate officer or director:</td>
<td>5, 6, 8, 9, 12-14</td>
<td></td>
</tr>
<tr>
<td>G. Corporate stockholder (usually has majority of shares):</td>
<td>5, 6, 8, 9, 12, 13</td>
<td></td>
</tr>
<tr>
<td>H. Proprietor of unincorporated business:</td>
<td>2, 5, 6, 8, 9</td>
<td></td>
</tr>
<tr>
<td>I. Partner in legal partnership:</td>
<td>5, 6, 8, 9, 15</td>
<td></td>
</tr>
</tbody>
</table>

* See Richard Jaffee's paper for additional sources of information on this subject—particularly in the area of private records. See also Mark Zanger's discussion of straw ownership.)

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Number

1. Marriage or birth records may show kinship to the suspected real owner.
2. Tenants (by where they send the rent), neighbors, or suppliers (by invoices, etc.) may know the real owner.
3. True and apparent owner may share a joint bank account.
4. True owner may hold a mortgage or chattel mortgage on the property.
5. Bank or other mortgagee may be questioned—or subpoenaed—as to all financial interest in a property.
6. Insurance records may show the true owner's interest in a property; insured's address may be "care of" the true owner or he may show as a loss payee who has no publicly recorded connection to the property.
7. True owner may be the beneficiary of a realty trust—subpoena the schedule of beneficial interest from the trustee or attorney. Determine from the beneficiary any pledge or assignment of beneficial interest in a trust.
8. Question the apparent owner before a grand jury as to any financial interest in a property.
9. Depose apparent owner; same information as No. 8.
10. Subpoena mortgagee's records to see if borrower ever made payments.
11. Subpoena bank account records of borrower to see if debit entries match mortgagee's record of payments (were the same amounts at the same times?).
12. Obtain records that identify stockholders (by subpoena if necessary).
13. Interview or subpoena stockholders to determine any pledges or assignment of stock.
14. Obtain records of last annual meeting, look for newly elected officers or directors whose names are not yet publicly recorded.
15. Obtain from all partners any indication of a pledge or assignment of financial interest.
1. Conveyances (sales of property). Property is usually conveyed by means of an instrument (written document) called a Deed, of which there are various types: a Warranty Deed means that the grantor (seller) warrants to the grantee (buyer) that he will protect the grantee against any claim arising out of his (the grantor's) ownership; in a Quitclaim Deed the grantor makes no promises about the title to the property, but simply quits his property to it; a Trust Deed conveys property to a third party, who holds it for the benefit of the grantee. 

Instruments of conveyance generally show: names and addresses of buyer and seller, the seller's description of the property (or properties), description of the property sold (usually by metes and bounds) and its land area, any obligations passed along to the buyer (mortgage, real estate taxes, etc.), excise tax stamps (ask a clerk to explain the excise tax rate), the signatures of the seller and a Notary Public (who is often an attorney), and the signing and recording date of the instrument. Note that if there is a great difference (i.e., several months or a year) between the dates of signing and recording, it may well mean that the seller was really a "straw" owner for the buyer, who simply held on the deed until he found an opportune time to record it (such as after a fire loss).

2. Property financing. Property purchases are most often financed by means of a mortgage, an instrument that declares that one or more pieces of property are being pledged as collateral against a loan of money. In fact, the loan may have nothing to do with the property that secures it, but if the borrower defaults (fails to pay off the obligation), the effect is the same: the lender has the legal right to foreclose (see below) the mortgage and take the property away from the borrower. There are variations in mortgage documents in different states. Some allow open-end mortgages, which allow the borrower to re-borrow up to the original amount of the mortgage without recording a new mortgage instrument (and usually at the original rate of interest). A purchase money mortgage is really an arrangement of credit between a property seller and the buyer; the seller allows the buyer to pay part of the purchase price over time. A contract of deed is a mortgage in which the document itself is put into the hands of a third party--sort of an escrow arrangement--and if the borrower defaults in payment, the third party may immediately turn the document over to the lender to initiate foreclosure.

APPENDIX

LAND RECORDS

Mortgages may be refinanced, the borrower may obtain additional money, or an additional period of time to pay off the mortgage (normally at a higher rate of interest), or both. This is indicated when a mortgage discharge or satisfaction (a document that shows a mortgage is paid off) is recorded and followed immediately by a new mortgage instrument from the same borrower to the same lender. Mortgages may also be assigned by a lender to another party, who then has the right to collect the payments. When a bank assigns a mortgage to a private party (individually or through a company), it sometimes means that it was having a problem collecting the payments, and that the assignee is a collection specialist. When a private party assigns a mortgage, it may mean the party has a need for immediate cash. A chattel mortgage or financing statement is similar to a mortgage, except that the loan of money is secured not by real property (land and buildings) but by personal or moveable property, such as furniture, fixtures, goods, equipment, etc. When the financial obligation of a chattel mortgage is over, a termination instrument is recorded.

When more than one property is used to secure a mortgage loan, the recorded instrument is known as a blanket mortgage. When the obligation concerning a single property in a blanket mortgage is paid off (usually by a sale to a third party), a partial release of mortgage for that property is recorded.

If a borrower defaults in payments of a mortgage, the lender may begin foreclosure process. The first indication of this situation is often a public notice (sometimes called an order notice), being recorded. This instrument notifies the owner, any junior mortgagees (lenders who gave the owner mortgage money after the senior mortgage), and anyone else who has a recorded financial interest in the property that foreclosure process is being initiated. Junior mortgagees may want to intercede in the process; if the junior mortgage forecloses and sells the property for a relatively small amount of money, all junior mortgagees will be wiped out--the junior mortgagee(s) would lose whatever money was unpaid against any such later mortgage(s). If a junior mortgagee forecloses, however, he still has the obligation to pay off the senior mortgage.

The lender may file a notice of entry to take possession, a process by which he simply goes to the property in the presence of at least two witnesses. At this point he becomes mortgagee in possession and has the right to collect all rents to apply towards the mortgage payments.
If the mortgagee records a court judgement (and approval to foreclose), it means he has been granted the formal authority to foreclose the mortgage and take title to or sell the property. If the mortgagee sells the property, to himself or to a higher bidder at an auction sale, a notice of foreclosure sale (sometimes known as deed under power of sale) is recorded—often along with an affidavit that the lender advertised the sale for a required period of time in a local newspaper.

3. Liens. Any recorded claim that someone has on the property of another is called a lien. The best-known type of lien is a mortgage; this is a secured lien (meaning that the property owner acknowledges the claim in a signed instrument). Unsecured liens are described in this section. Municipalities, states, and the federal government may record tax liens—claims against a property for unpaid taxes of any sort. If a property owner does not pay real estate taxes for a prolonged period, the town or city may record an instrument of taking or tax-taking against the property. This simply means that the town is establishing a lien on the property. If the taxes are still not paid, the town may begin tax foreclosure process by filing a notice petition (notice to all interested parties that a foreclosure petition has been presented to the local land court). If the town follows through with the action, it will receive a court judgement and, eventually, a final decree by the court that the property has reverted to the town. Throughout all of this process the owner may redeem his title to the property by paying the delinquent taxes and fees, in which case the town would file a release instrument.

A lien may be placed on property as a result of a civil court suit. This lien is known as an attachment. There are two types: an attachment of contract, or mechanic’s lien, is an action brought by someone who contracted to do work for the owner but was not paid for this work. The other type is an attachment of tort, where someone sues a property owner for neglect or for harm or damage caused at a property. This usually results from an accident that occurs at a property. If the plaintiff in either type of civil case wins the suit, he is given a writ of execution by the court. If at this time the defendant/owner still does not pay the damages awarded by the court, the writ may be presented to the county sheriff, who seizes the property shown on the writ. The sheriff may then auction off the property and give the proceeds to the plaintiff in payment for his damages. In this case a sheriff’s deed would be recorded. This is a fairly unusual occurrence. When it does occur the defendant, as a rule, later settles with the plaintiff, who deeds the property back to him. Very rarely an owner who has abandoned a property will allow it to be taken in this manner, especially if he feels the property’s value is minimal.

4. Miscellaneous instruments. If title to a property is to be held by a realty trust, an indenture or declaration of trust is recorded. This document sets forth the trustee, who manages the property and the trust affairs, the terms of the trust (rights, duties, and functions of the trustee and term of the trust), and—the names of the individual(s) who may be the beneficiary of the income from the trust or from sale of the property. Some states also allow shareholder trusts, which sell shares of interest in the property owned and act much like corporations (they are often regulated by the state department of corporations). Amendments to a trust may be filed. Leases are sometimes recorded—usually commercial businesses that want to establish that they have a long-term interest in a property (in case the property is later sold). An assignment may be recorded to give an outside a right of way onto the property—often granted to utility companies, sometimes granted to abutters. Occasionally a death certificate will be recorded to show that a property owner has died and someone else must sign for him.
Interviewing Witnesses, Informants, and Suspects

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Director of Investigations
Office of the Special Prosecutor
New York, New York

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Interviewing Witnesses, Informants, and Suspects

Introduction

This paper will focus on interviewing suspects and witnesses in arson-for-profit cases. It is based on the assumptions that the cause of the fire has already been determined to be incendiary and that the investigators have some reason(s) to believe that fraud may be the motive.

Interviewing is often the most important technique employed in an investigation. This is certainly true in an arson-for-profit investigation. But questions should never be asked in a vacuum. In an arson-for-profit case there is a good deal of preliminary work to be done before the questioning of sources of information begins, and particularly before targets are identified and questioned. Among other things, the investigator must know what physical evidence has been gathered, what was the probable cause of the fire, and what the insurance, business, mortgage, and other records reveal. The amount of other evidence available to the investigator will help determine the order in which people will be questioned, as well as the focus of that questioning.

The terms "sources of information" and "informer" are used extensively throughout this paper. They are not interchangeable. Sources of information should be understood to mean anyone who provides information in the normal course of his functioning as an official, an employee of a business concern, or a witness to events. In a more restrictive sense, an informer is someone who, because of his involvement in or connections with the criminal world, can provide the investigator with information that is not available elsewhere and which could go to the heart of uncovering an arson-for-profit scheme. The finding, developing, and use of informants can be a very important part of arson-for-profit investigations, and part of this paper will address that subject.

I. Motive Behind Arson

To suspect that "profit" rather than revenge, vandalism, or some other motive is behind an arson is the first step in an arson-for-profit investigation. But, like many first steps, it poses more questions than it answers. The most logical suspect is the owner of the property or business. The question to be answered here is: Did the owner profit from the fire or, at least, have a reasonable expectation of profiting from it? The term "profit" should be thought of in its broadest sense. An owner may profit from a burning by collecting insurance. He
may have already profited by receiving the proceeds from the mortgage. The property may also be more valuable without a structure on it, if the parcel has been targeted for redevelopment. In addition to the owner, however, there are a number of other possible target suspects, including professional fire brokers and other leaders of an organized arson ring. There are a number of sources of information that could help determine the motive and involvement of the owner/target. These sources can logically be divided into two categories: (1) Those which may reveal possible financial stress faced by the owner/target; and (2) Those which may reveal possible fraudulent activities by the owner/target.

In the first category are people who possess or have custody over records that could, if analyzed properly, reveal financial stress. These include the lands record office or county clerk, insurance agent, bank mortgage loan officer, building or other code enforcement inspectors, and, if the property is a commercial one, suppliers or creditors. One caution to be observed in questioning some of these people (i.e., creditors or suppliers) is that they may be part of the conspiracy (if one exists) or they may stand to lose money if the owner of the property is convicted of fraud. One advantage to the investigator, however, is that even if one or more of these people are part of the conspiracy, their positions make it difficult for them not to at least seem to be cooperating in the investigation. Early on, if the investigator suspects that they are supplying false information, he may be able to develop a perjury or similar case against such an individual.

Below are the kinds of information an investigator could hope to gain from each of the following:

- **Lands Record Office or County Clerk.** Present ownership of the building. History of ownership of the building, particularly recent changes in ownership at inflated prices. (On this subject see Schmidt's and Zanger's Tactical Guides on record searches and economic intelligence contained in Part II of this manual.)

- **Building and Other Code Enforcement Inspectors.** History of building, electrical, sanitary, and other violations. Current violations that would be expensive to correct. Outstanding fines. Possible condemnation proceedings against building. Also, federal violations involving EPA, OSHA, or Consumer Product Safety Commission regulatory activities.

- **Bank Mortgage Loan Officer.** Amount of mortgage. Contents of loan application file. When was building mortgaged? Status of mortgage payments--is owner behind in payments; and mortgager's payment record. When next payment due.

- **Insurance Agent/Broker.** Name of insured. Amount of policy. Type of policy. When policy issued. Recent increases in policy. Business or rental interruption insurance. Previous losses at location. Previous losses at other locations by same insured.

- **Creditors.** Financial information on business. Bills outstanding and length of time past due. Indications of a combined bankruptcy fraud-arson scheme.

- **Suppliers.** Money owed to suppliers. Recent increases in amount of merchandise shipped to business. (Owners may increase inventory and move it secretly to another location before the fire to increase insurance profit.)

- **Tenants and Former Tenants.** Attempts by owner to evict tenants. (Owners may not want to cause death in fire or may fear more complete investigation if death or injury occurs.) Problems between tenants and owner, such as rent strikes, which would decrease profits from building, movements of owner and/or others both prior to and at the time of the fire.

- **Fire Officers and Investigators.** Fire history of burned building and owner's other buildings. Type of incendiary device or materials used. Evidence of pre-fire removal of inventory, furniture, or fixtures, such as copper pipe. Locked doors or windows--shows access limited to key holders. Proximity of fire to roof. (Many buildings considered "totally destroyed" if roof destroyed.) Appendix I presents a list of questions that can be used to obtain information regarding the arson-for-profit incident.

II. **Use of Informants**

The second major source of information includes the various informants who may reveal the fraudulent activities of the owner/target. In an arson-for-profit investigation there are two major types of people who are potential informants--individuals who are not directly involved in the arson-for-profit scheme but knowledgeable of certain activities, and those who are involved in the scheme. The following list, although far from complete, indicates some examples of individuals who could serve as informants and the information they might provide:
provide first person narrative of direct evidence that explains and ties together the diverse threads of the circumstantial evidence pointing to guilt. Appendix III lists some possible questions to be asked in interviewing a suspect to be turned, including specific questions directed at the torch.

The success of the investigator in "flipping" a conspirator depends in large part on his artful use of the prime causes for such cooperation—greed and/or apprehension of conviction and imprisonment. While information may, on occasion, be purchased with money from an informant, the investigator cannot hope to compete monetarily with the payment that a lucrative arson conspiracy can offer in competition. Thus, the relatively limited financial inducements that can be made available by the investigator must be combined with an even more powerful motivator, the threat of prosecution.

Before attempting to use this approach, the investigator must be sure that he has developed an air-tight case against the target. Only then can the investigator hope to credibly approach and "turn" that target by convincing him of the hopelessness of his situation, and the advantage of cooperating with the authorities as well.

The cultivation and management of informant/witnesses is an art and a subject that cannot be adequately covered in this paper. Nevertheless, the investigator must be aware of certain basic rules in this complex area. First, never under any circumstances allow the informant/witness to gain the upper hand or to dictate or otherwise steer the course of the investigation. At all times, the investigator must remain in control of the informant/witness or else it will be the investigator who is compromised. There can be no exceptions to this rule.

Second, the investigator should never make the informant/witness a full partner in the investigation. In other words, the investigator should disclose no more concerning his investigation than is absolutely necessary to obtain and use information from the informant. One reason for caution is that the informant may shift his loyalties back to his former criminal associates or may even ply them with information about the investigation while simultaneously providing information to the investigator. The investigator should anticipate these divided loyalties and limit the potential damage to his case by restricting the extent of the information shared with the informant.

Third, the investigator must use absolute and total honesty in dealing with the informant/witness. Whatever agreements are reached as to what he will receive in exchange for his information should be kept. These agreements may range from a
promise to keep his identity secret to an understanding that his cooperation will be made known to the prosecutor and judge in any pending criminal action against him. Even though the average informant/witness will be a person of highly questionable moral character, the investigator's conduct must always be above reproach, since the informant may well disclose to defense counsel any real or apparent indiscretions committed by the investigator. While not always relevant, this kind of derogatory material can be used by defense counsel to distract the jury from the issue of the defendant's guilt. Accordingly, any and all contacts between the investigator and the informant must be honest, forthright, and meticulously documented. Statements taken from the informant should be reduced to writing and submitted to the informant for his review, modification, and signature so that there can be no question at a later time as to their accuracy.

Fourth, the investigator should keep in mind that many informants, in an attempt to avoid prosecution and curry favor with the investigator, will be inclined to say what the informant thinks the investigator wants to hear. This tendency among informants is extremely dangerous, and the investigator should be on constant alert for it. The investigator should always make the information being provided by the informant at each and every stage and immediately clear up any inaccuracies or falsehoods prior to their being incorporated in the informant's signed statement. This becomes particularly important in light of the fact that all such signed statements will be subject to discovery by defense counsel at the time of trial and can be used to impeach the credibility of the informant/witness. Accordingly, the informant/witness should be made aware of the fact that at some later date his undercover activities will become known to his associates and that he will be compelled to provide testimony in open court. In order to make him more automatic and as accurate as possible, one key to avoiding inaccuracies in the informant's statement is to seek as much corroboration as possible through the circumstances surrounding the informant's story. In this regard, no item of corroboration should be considered too trivial. For example, should the informant advise that he met with other members of the arson conspiracy at a given date and registered under a given name, the motel records for that date should be checked for corroboration. (It is hoped that the records will show that the informant is mistaken as to the actual date and, by referring to the records, a more accurate sequence of events can be structured.) If the informant claims to have made a long distance call to another member of the conspiracy on a given date and time, the appropriate telephone toll records should be checked to confirm that fact. This type of investigative work is often tedious and exacting, but it is absolutely necessary to bolster and corroborate the testimony of the informant.

One of the most effective means for corroborating the informant's statements is the use of a body transmitter electronic surveillance device. Should the investigator determine that the informant continues to remain in contact with his co-conspirators and that they are unaware of the informant's cooperation with him, the investigator should consider placing an electronic listening device on the person of the informant and sending him back to discuss with his former associates their criminal activities. Where it could be dangerous for the informant to meet with his associates, a radio transmitting device should be considered, since it will permit the meeting to be monitored as it occurs. The investigator should be aware, however, that many professional criminals are aware of the existence of such devices and will immediately detect their transmissions. Accordingly, if at all possible, the investigator should utilize a non-transmitting miniature tape recorder which can be hidden on the person of the informant.

In preparing for these meetings, the investigator must be scrupulously careful to avoid having the informant entrap his associates by suggesting to them further criminal acts in which they may participate. Similarly, should any member of the conspiracy be subject to pending criminal charges, the informant must be careful not to elicit information from that individual concerning those pending charges or the strategy to be used in his legal defense. Once a tape has been made of a meeting between the informant and his associates, as soon as possible it should be transcribed and reviewed with the informant to determine the accuracy of the transcription. This should be done as soon as possible after the actual conversation so that the informant's recollection of events will be fresh and, thus, he will be better able to supplement and clarify the contents of the tape.

Any meeting between the informant and his former associates should be covered by a physical surveillance. This step will help protect the informant, corroborate the fact of the meeting, and facilitate the identification of voices. Surveillance by an investigator who recognizes the other members of the conspiracy and is able to identify them, will provide significant corroboration for the voice identification by the hidden listening device. Physical surveillance by an investigator who recognizes the other members of the conspiracy and is able to identify them, will provide significant corroboration for the voice identification by the hidden listening device. Physical surveillance by an investigator who recognizes the other members of the conspiracy and is able to identify them, will provide significant corroboration for the voice identification by the hidden listening device. Physical surveillance by an investigator who recognizes the other members of the conspiracy and is able to identify them, will provide significant corroboration for the voice identification by the hidden listening device. Physical surveillance by an investigator who recognizes the other members of the conspiracy and is able to identify them, will provide significant corroboration for the voice identification by the hidden listening device. Physical surveillance by an investigator who recognizes the other members of the conspiracy and is able to identify them, will provide significant corroboration for the voice identification by the hidden listening device.
to make that type of voice identification, the investigator should endeavor at the time of arrest to engage the conspirators in conversation so that he may then testify at trial as to the identities of the voices on the tape.

The informant's word, standing alone, is virtually worthless in court. Properly corroborated, however, by layer evidence, it can become a very powerful tool in the hands of a prosecutor. Through the informant, the prosecutor will be able to articulate and communicate to the jury the theory of the circumstantial evidence in the case. For this reason alone the testimony of the informant/witness can be extremely important to a successful prosecution.

III. Interviewing the Target(s)

The most important interviews to be conducted in an arson-for-profit investigation are those of the targets of the investigation. Because this is so, a number of preliminary steps should be taken before these interviews are conducted. These steps and their importance are discussed in the following paragraphs.

A. Determining the Cause of the Fire

The investigator should have as much information on this subject as possible. The accelerant and devices used to start the fire may be traceable to the insured. He may have purchased items for which he had no apparent legitimate use. Or the devices used in the fire under investigation may have been used in a number of other fires. This could indicate that the current fire is only part of a larger organized scheme to burn a number of buildings. If this is so, the investigator should change the status of the insured from that of the main target of the investigation to that of someone who might be "turned" to use against the organizers of the overall scheme.

B. Surveillance

Surveillance is an expensive and time consuming method of investigation, especially post-fire. There are times, however, when it might be worthwhile. If other investigative steps have not been productive, a limited surveillance of the target prior might uncover a financial motive not turned up by other means, i.e., the insured may be keeping a mistress or gambling beyond his means at a race track or casino. A post-interview surveillance may disclose attempts to destroy evidence or a meeting with other participants in the conspiracy.

C. Records, Intelligence, and Information

Before questioning the target of an arson-for-profit investigation, the investigator should have as much information and intelligence as is available about the target's financial position, his insurance coverage, the history of the building, his ownership of other properties, the cause of the fire, the value of claims in contrast to the actual (or approximated) value of the inventory, furniture and fixtures actually present in the burned building, and other items covered in this guide.

The investigator should have formed some opinions as to the existence, and if so, the extent of the conspiracy. Is it a simple arson? That is, has the owner set his own fire to collect on his insurance coverage? Or is it complex? Are there multiple and/or successive ownerships of property at higher, inflated valuation? Is there more than one property involved? Have there been increases in coverage, in deliveries of merchandise? Is the property worth more without a building on it than with one on it? Is there evidence of a particular torch's "signature?" Does this burning fit into a previously detected pattern of arsons? How many participants are likely to have been involved? How culpable is each participant in relation to the others?

IV. Order of Questioning

The order in which people are questioned is important. In each interview, the interviewer, no matter how skilled he is, will give up some information to the person being interviewed. This is unavoidable. The nature of the questions asked will indicate the interests and concerns of the questioner. A skilled interviewer, however, can minimize the amount of information he imparts to the "other side," and he can do this by the form which his questions take. Questions should be asked in as simple and direct a manner as possible.

Thought should be given both to the form and content of each question. "Did anyone have a key?" reveals less information to the person questioned than "Isn't it true that John Doe Partner had a key?" and should be asked at the outset. But, more importantly, the investigator can minimize the information flow by the order in which he questions people. Ideally, each interview should be designed to increase the knowledge of the investigator as to what took place and why. The more information obtained from "fringe" people, i.e., those at the farther extremes of the conspiracy who participated less and thus know less about the crimes, the more
intelligently the investigator will be able to question the main subjects.

Questioning of the main subjects at too early a stage in the investigation is likely to result in the persons being questioned learning more than the questioner. In the best of all possible worlds the main subject of the investigation will not have to be questioned at all. Other evidence will be sufficient to indict and convict. Unfortunately, the best of all possible worlds does not normally include the investigation of "arson-for-profit" crimes. The owner/target will probably have to be questioned.

There are a number of interview settings and tactics that can be used. The owner may be questioned in the field as the presumed victim of the arson. He will be under some constraints to answer certain questions as to the circumstances surrounding his ownership of the building. Questions regarding access to the building, the number of people who had keys, and access to the building: the owner professes to have can all be asked in a field interview. If he stands to benefit from the insurance, the owner will want to convince the investigating officers of his non-involvement in the arson. He will lie or attempt to do so in answering the questions. His lies may be of value to the investigating officers in developing perjury charges ancillary to the arson and fraud investigation. The more matters he lies about, the more matters the investigating officers may be in a position to disprove. While lying to an investigator during a field interview is not usually a crime, such lies may be used to discredit the target at a subsequent trial, or may be introduced as evidence at a grand jury presentation, either directly by the investigator's testimony or to form the basis for questions to be asked the target in the grand jury. (Note: In many states, statements taken in the field by deputy state fire marshals are covered by special perjury and similar false statement statutes.)

There may be investigations where the owner/target refuses to be interviewed by investigators in the field. The target's role in the overall investigation may be such that his testimony is important enough to consider using the grand jury. Appendix IV contains a set of possible questions to be asked of the owner/target, and Appendix V provides several sample interview forms which offer the reader an example of how interviewing information could be collected. Appendix V also shows a sample case checklist summarizing the important interview stages of the investigation.

V. Grand Jury Questioning

At this point in the investigation, it may be necessary and/or desirable to shift the location of the questioning to the grand jury. There are a number of reasons why convening a grand jury makes sense. True, the witness cannot be compelled to testify without receiving immunity from prosecution but, depending on the nature and scope of the investigation and the potential information to be gained, immunity for one or more fringe participants or even one or more of the targets may be a small price to pay for the success of the investigation.

It should also be obvious that the use of the grand jury is normally not employed until the later or final stages of an investigation. Before recommending that a witness or witnesses be granted immunity, the investigative team should have a good idea of the dimensions of the arson conspiracy under investigation and the relative importance of the participants in terms of the information to be gained by a grant of immunity as opposed to the loss of the immunized witness as a defendant.

The witness, if he is part of the conspiracy, is put between "a rock and a hard place." Since he has immunity from prosecution, he no longer can plead that his answers will incriminate him. In this part of the conspiracy, his answers to the right questions should incriminate other, and hopefully more important participants in the conspiracy. If he chooses to lie or refuses to answer the questions put to him, he faces prosecution for perjury or contempt.

Investigators may be reluctant to recommend that one of the potential "targets" be subpoenaed before the grand jury and given immunity. But, it may be the only recourse left if all other investigative steps have been taken and there is still not enough evidence to prosecute any of the targets successfully. If there is only one target in the investigation, then he should probably not be questioned in the grand jury. There would normally be no purpose served by giving immunity to the sole suspect in the investigation.

VI. Final Thoughts

No two investigations are exactly alike. It would be nice if in every investigation all of the steps discussed in this
guide could be taken in the proper order. But investigations have their own momentum. Depending on the circumstances and the opportunities which present themselves, investigators may early stage in the investigation. If that is the decision, at least it should be made with an awareness of the risks involved and the pitfalls to be avoided.

Investigators should also be aware that there are a number of crimes that may be committed in addition to the arson. Larceny may be committed by fraud. Burglary may be a chargeable offense in connection with the arson. There may be false swearings and the filing of documents in connection with the scheme which constitute separate crimes. If there is more than one party involved in the arson, there is probably a conspiracy or at least a criminal solicitation, aiding and abetting, and accessory before and after the fact violations. There may be tax statutes which are violated. If witnesses are called before a grand jury, there may be the testimonial crimes of perjury or contempt committed.

The investigator should familiarize himself with the entire range of offenses which may be committed in connection with an arson-for-profit scheme. Any one of them may be the crime that the investigator is able to use to charge the offender or to convince him to cooperate in the investigation. The success of the interview, if conducted properly, will most often depend on the amount of information the investigator has amassed before the interview begins.

Finally, the success of any investigation will be affected by the way in which the investigator handles the evidence. This applies to the information generated from interviewing as well. Facts should be organized in an orderly fashion, so that information can be transmitted between investigators or different agencies.

APPENDIX I
Sources of Interview Information

The following is a list of some of the possible witnesses to acts committed in connection with an arson-for-profit scheme and the types of questions they should be asked:

I. Interview of Witnesses at Scene of Fire

A. Possible Witnesses:
- Tenants of building
- Tenants of surrounding buildings
- Businessmen in building
- Businessmen in surrounding buildings
- Customers of businesses in building
- Customers of businesses in surrounding buildings
- Passersby including: bus route drivers, taxi drivers, deliverymen (milk, bread), garbage collectors, police patrols, people waiting for buses and taxis

B. Questions to be Asked:
- Did you observe the fire?
- At what time did you first observe the fire?
- What called your attention to the building?
- Did you see anyone entering or leaving the building prior to the fire?
- Did you recognize them?
- Can you describe them?
- Can you describe the smoke and the color of the flame?
- How quickly did the fire spread?
- Were doors and windows locked?
- Was the building burning in more than one place?
- Did you detect any unusual odors?
- Did you observe anything else?
- What else did you observe?

II. Interview of Fire Officers and/or Firefighters at Scene

A. Questions to be asked:
- What time was alarm received?
- What time did you arrive at scene of fire?
- Was your route to the scene blocked?
- Was the extent of burning when you arrived?
- Were doors and windows locked?
- Was the entrance and/or passageways blocked?
- What kind of fire was it?
What was the spread speed of the fire?
In what areas (s) did the fire start?
What was the proximity of the fire to the roof?
Was there evidence of the use of an accelerant?
Was there any evidence of arson recovered?
Did the building have a fire alarm system?
Was it operating?
Was there any evidence of tampering with the alarm system?
Did the building have a sprinkler system?
Did it operate?
Was there any evidence of tampering with the sprinkler system?
Was there anyone present in the building when you arrived?
Who was that person in the building?
Did he say anything to you?
Were there any people present at the scene when you arrived?
Who were they?
Did you observe any vehicles at the scene or leaving when you arrived?
Can you describe them?
Were there contents in the building?
Was there evidence of content removed?
Was the owner present?
Did he make a statement?
What did he say?
What is the prior fire history of the building?
What is the prior fire history of the area?

III. Interview of Insurance Personnel

The profit in many arson-for-profit cases is the payment from an insurance policy or policies. There are three classes of people who may be interviewed in order to determine if the profit centers around an insurance claim. They are the insurance agent/broker, the insurance adjuster, and the insurance investigator.

A. Questions to Ask the Agent or Broker:

Who is the insured?
Is there more than one insured?
Is the insured the beneficiary?
What type of policy was issued?
What is the amount of the policy?
When was it issued?
When does it expire?
What is the premium cost?
Are payments up-to-date?

B. Questions to Ask the Insurance Claims Adjuster:

Did you take a sworn statement from the insured?
Did the insured submit documents regarding proof of loss, value of contents, bills of lading, value of building, etc.?
Did you inspect the fire scene?
Did you inspect the fire scene with a public insurance adjuster?
Did you and the public adjuster agree on the cost figure of the loss?
Have you dealt with this public adjuster before?
Has the insured had any other losses with this company? If so, get details.

C. Questions to Ask the Insurance Investigator:

Were you able to determine the cause of the fire?
Did you collect any evidence?
Who analyzed the evidence?
What were the results of the analysis?
Was the cause of the fire inconsistent with state of building as known through underwriting examination?
Have you investigated past fires involving the location?
Have you investigated past fires involving the insured?
What were the results of the investigations?
Have you had prior investigations involving the public adjuster?
Have you had prior investigations involving buildings handled by the same insurance agent/broker?
What were the results of these investigations?
Does this fire fit into a pattern of fires of recent origin in this area?
What are the similarities?
What are the differences?
Have you taken any statements in connection with this burning?
Whose statements did you take?
What do they reveal?

Have there been any increases in amount of coverage?
What amount?
When did increase take effect?
What was the reason for the increase?
Are there any special provisions in the policy?
(E.g., interruption of business or rental income.)
What are they, and when did they take effect?
Has the insured ever received a cancellation notice on this property? If so, when? Why?
Does the insured have any other policies?
Were there previous losses at location of fire?
Were there losses at other locations owned by the insured?
There may be restrictions on the amount of information insurance personnel can turn over without a subpoena, but the investigator should be able to determine enough to indicate whether the issuance of a subpoena or search warrant would prove fruitful.

IV. Other Witnesses Concerning Finances of Insured

There are a number of other people who may have information relating to the finances of the owner which may indicate how he stood to profit from the burning. These witnesses would include business associates, creditors, and competitors. (See also the guide by Harvey Schmidt in Part II of this manual.) Following are the types of questions these witnesses may be able to answer:

- How long have you known the owner/insured?
- What is the nature of your relationship with him?
- Do you have any information on the financial position of his business?
- Is he competitive with similar businesses?
- Have there been recent technological advances which would threaten his position?
- Has there been a recent increase in competition which would affect his position?
- Have changes in the economy affected his position?
- Has he experienced recent difficulty in paying creditors?
- Has his amount of debt increased recently?
- Has he lost key employees recently?
- Has the location where he does business changed for the worse recently?
- Has he increased his mortgage or taken out a second or third mortgage?
- Has he had difficulty making mortgage payments?
- Do you have any other information about his financial position?

APPENDIX II

Interviewing a Potential Informant Who Is Not a Suspect

Prior to interviewing, obtain general background information about the informant including criminal record, if any, and whether subject has been or is currently an informant for any other law enforcement agency. Other questions to ask a potential informant are:

- How are you currently supporting yourself?
- Do you have any pending prosecutions against you?
- Where? What are you charged with?
- Do you have any information about arson-for-profit in this city, county, state?
- How did you acquire this information?
- Do you know anyone engaged in arson-for-profit schemes?
- What role does that person play in the scheme?
- How do you know this?
- What is your relationship with him/them—loan shark, bookmaker, fence, etc.?
- Where does this person live, frequent?
- Who are his associates?
- Do you know them?
- Are they part of the scheme?
- Have you been asked to involve yourself in the scheme?
- In what way?
- Have any of these people talked freely to you about their activities?
- Have they talked in your presence?
- What was said?
- Can you engage them in conversation about past arsons—future arsons?
- Would they be suspicious of you?
- Could you engage them in conversation about past arsons—future arsons?
- Would they be suspicious of you?
- Could you wear a concealed recorder during conversation?
- Could you introduce an undercover officer into group?
- Would you be willing to testify in the grand jury?
- Would you be willing to testify at trial?
- Would you be willing to swear to an affidavit for a search warrant?
- Would you be willing to swear to an eavesdropping warrant?
- What do you expect in return for your help?
APPENDIX III

Interviewing a Suspect to Be Turned

The following is based on the assumptions that the person to be interviewed is involved in an arson-for-profit scheme, the investigation has enough evidence for an arrest or at least enough evidence to convince the subject of the interview he is liable to arrest, and the interviewee would be of more value to the investigation in a cooperative role than as a defendant.

A. Questions to Ask the Subject:

• Are you willing to cooperate in this investigation?
• How many other people are involved in the arson-for-profit scheme?
• How are they involved?
• What role does each person play in the scheme?
• Explain (in detail) how the scheme works?
• How did you first become involved in the scheme?
• How did you meet the other participants?
• Where did you meet the other participants?
• Are you still in contact with the other participants?
• How often do you see them?
• Where do you see them?
• What do you talk about when you meet with them?
• Would you be able to record your conversation with them?
• Are you willing to record your conversations with them?
• Would you be willing to introduce an undercover investigator into the group?
• Could you introduce an undercover investigator into the group without them becoming suspicious?
• How far in advance of an arson are you told about it?
• What role do you play in connection with the arson (torch, driver, pigeon, fence, etc.)?
• Are you willing to be the affiant of a search warrant?
• Are you willing to testify in the grand jury?
• Are you willing to testify at trial?
• Do you have information on other arson-for-profit schemes?
• If answer is yes, see section in this guide on "Interviews of Potential Informants."

B. Questions to Ask the Torch, Specifically:

• What method(s) was/were used to accomplish the arson(s)? Specify: incendiary device, gasoline or other flammable fluid, other.
• If an incendiary device was used, be specific as to the type of device.
• Where did you obtain the incendiary device and if improvised, who made it?
• How much did it cost?
• Who paid for the incendiary device?
• If gasoline or other flammable fluid was used, where was it obtained?
• How much was obtained and used?
• Are any special techniques used in setting a fire or causing an explosion so as to avoid detection?

The target of the investigation may be an owner, landlord, fire broker, etc. The interview should take place after obtaining the relevant background information outlined in the text of this guide and after interviewing the individuals listed on the previous pages.

A. General Questions to Ask the Target:
• Tell me in your own words what you know about this fire.
• When did you first hear of the arson? Who told you?
• Where were you and what were you doing before, during, and after the arson? Who was with you?
• Do you know who committed the arson?
• Do you have any knowledge of any previous fire at the building?
• Do you have any knowledge of any previous incidents of any kind and at any location owned or rented by the owner/occupant of the building?
• Do you know of any recent changes in insurance coverage?
• Do you know the owner of the arson property?
• Describe your relationship to the owner?
• Do you have any financial interest in the burned property?

B. Questions to Ask the Owner:
• Tell me in your own words what you know about this fire.
• How long have you owned the burned property?
• What was the purchase price?
• What was the total amount of the mortgage?
• What is your insurance company? Agent/broker? Public adjuster?
• How much insurance do you carry?
• Is there more than one policy on this property? On its contents? On rental or business interruption?
• Have you increased your insurance coverage on the property in the past year? If so, why and at whose suggestion?
• Have you ever received an insurance cancellation notice on this property?
• Where were you at the time of the fire?
• When did you first hear of the arson? Who told you?
• When were you last in the building?
• Was the building secured? If so, in what manner?
• Who else has access to or keys to the building?
• Who was the last person to leave the building?
• Do you have any knowledge that the sprinkler system and/or burglar alarm system was on and working?
- Indicate the name and address of all lienholders.
- What is the amount of each lien?
- What was the value of the inventory on hand immediately prior to the fire?
- Can you provide documentation for the value cited in the previous question?
- Was any inventory removed from the premises prior to the fire? Where did it go, and why was it removed?
- If yes, by whom and for what purposes?
- Was any inventory removed from the premises after the fire?
- If yes, by whom and for what purposes?
- List the inventory so removed and its value.
- Did you set the fire or cause it to be set?
- Do you know who set it?

C. Additional Information to Be Obtained from Owner:

The following information should be obtained by the investigator. Preferably, as much of this information as possible should be obtained prior to interviewing the owner. Thus, the answers to the following questions can be used to demonstrate contradictions between evidence and testimony. In any case, the additional information will shed light on the owner's profit motive.

- Please supply any of the following information you may have:

<table>
<thead>
<tr>
<th>Assets</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Value of stock</td>
<td></td>
</tr>
<tr>
<td>Value of fixtures</td>
<td></td>
</tr>
<tr>
<td>Accounts receivable</td>
<td></td>
</tr>
<tr>
<td>Percent factored</td>
<td></td>
</tr>
<tr>
<td>Loans receivable</td>
<td></td>
</tr>
<tr>
<td>Percent past due</td>
<td></td>
</tr>
<tr>
<td>Loaned to</td>
<td>Terms</td>
</tr>
<tr>
<td>Stocks</td>
<td></td>
</tr>
<tr>
<td>Bonds</td>
<td></td>
</tr>
<tr>
<td>Other tangible assets</td>
<td>Name of bank</td>
</tr>
<tr>
<td>Bank balance</td>
<td></td>
</tr>
<tr>
<td>Total assets</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts payable</td>
<td>Percent past due</td>
</tr>
<tr>
<td>Loans payable (total due)</td>
<td>Original amount</td>
</tr>
<tr>
<td>Date issued</td>
<td>Terms</td>
</tr>
<tr>
<td>Payable to</td>
<td>Rent/mortgages (total due)</td>
</tr>
<tr>
<td>Date issued</td>
<td>Terms</td>
</tr>
<tr>
<td>Payable to</td>
<td>Taxes due</td>
</tr>
<tr>
<td>Federal withholding</td>
<td></td>
</tr>
</tbody>
</table>

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Federal profits  
Federal excise  
State withholding  
State profits  
State sales  
City/county gross receipts  
City/county sales  
City/county occupancy  
City/county rent  
City/county real estate  
Other liabilities  
Total liabilities

- Obtain all bank accounts (savings, checking, loan, etc.)
- Other financial information
  - Monthly payroll
  - No. of employees
  - No. of employees 1 year ago
  - Monthly rent
  - Lease
  - No. years to expiration
- List of employees—name, position, weekly salary, date started, date ended, home address, home phone, work hours, social security number
- Operating costs
  - Commissions, monthly
  - Heat, electric, phone
  - Other
  - Volume of business, monthly
  - Yearly
  - Orders on hand
  - Names of companies
  - Recent cancellations
  - Names of companies

- Name of all officers in the corporation
- Date incorporated
- Name of attorney who incorporated
APPENDIX V
Sample Interview Forms*

<table>
<thead>
<tr>
<th>SUPPLIER INTERVIEW</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Investigator(s) present ____________________________</td>
<td></td>
</tr>
<tr>
<td>Case # __________ Date __________ Name of supplier __________</td>
<td></td>
</tr>
<tr>
<td>Address of supplier ________________________________</td>
<td></td>
</tr>
<tr>
<td>Name of person interviewed __________ Title __________</td>
<td></td>
</tr>
<tr>
<td>Telephone number of supplier __________ Type of supplier __________</td>
<td></td>
</tr>
<tr>
<td>When first had (insured) as a customer __________ How referred __________</td>
<td></td>
</tr>
<tr>
<td>Usual order (week, month, etc.) __________</td>
<td></td>
</tr>
<tr>
<td>Amt. of order 6 mo. ago __________ 1 mo. ago __________ Week of fire __________</td>
<td></td>
</tr>
<tr>
<td>Method of payment (COD, cash, credit) __________ Problems __________</td>
<td></td>
</tr>
<tr>
<td>Was method of payment ever changed __________ Why __________</td>
<td></td>
</tr>
<tr>
<td>Have you ever known this account to fall into arrears __________ Action taken __________</td>
<td></td>
</tr>
<tr>
<td>List items that were supplied ____________________________</td>
<td></td>
</tr>
<tr>
<td>Unit prices of items ____________________________</td>
<td></td>
</tr>
<tr>
<td>Usual total cost of order $ __________ Maximum $ __________ Minimum $ __________ Dates __________ Dates __________</td>
<td></td>
</tr>
<tr>
<td>Do you know of other suppliers who did business with this customer __________</td>
<td></td>
</tr>
<tr>
<td>Overall, would you consider this account satisfactory or unsatisfactory __________</td>
<td></td>
</tr>
<tr>
<td>How did this customers' order compare with other accounts of similar business __________</td>
<td></td>
</tr>
<tr>
<td>Were you ever notified to stop deliveries or terminate account __________ Why __________ When __________</td>
<td></td>
</tr>
<tr>
<td>(Obtain copies of invoices for last 3 to 4 billing periods if available. If not, try to get copy of last order and invoice.)</td>
<td></td>
</tr>
<tr>
<td>When was last order paid for __________ In not, what action has been or will be taken __________</td>
<td></td>
</tr>
<tr>
<td>Other information necessary for particular case:</td>
<td></td>
</tr>
</tbody>
</table>

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Preceding page blank 261
MORTGAGEE INTERVIEW

Investigator(s) present ____________________________ ___________________________________________________
Case # ____________________________ Date ____________________________
Name of mortgagee's representative (bank officer, etc.) ____________________________
Address ____________________________ Telephone number ____________________________
Title of person interviewed ____________________________
When did you become a mortgagee ____________________________
What were the circumstances that you became a mortgagee ____________________________
How did the mortgagor come to grant you a mortgage ____________________________
Amount of original mortgage ____________________________
Terms: Interest ____________
Term of mortgage: months/years ____________________________
Was mortgage ever increased or rewritten ____________________________
Current payments: Principal $ ____________ Interest $ ____________ Taxes $ ____________
Date of last payment ____________________________
Were payments ever late ____________________________
Were payments ever early or combined with future payments ____________________________
Who made the payments ____________________________
Current balance of mortgage ____________________________
If not up to date, what action has been or will be taken ____________________________
Any other business with (insured) ____________________________
If you discovered the fire at (loss address) ____________________________
Have you spoken to the mortgagor since the fire ____________________________
Have any arrangements been made regarding payments since the fire ____________________________
Insurance information regarding property ____________________________
Conditions of mortgage ____________________________
When was property last inspected by you ____________________________
Before writing mortgage ____________________________
What did you determine the value of the property to be ____________________________
(If value was less than mortgage, why was mortgage higher) ____________________________
Did you ever file or begin foreclosure proceedings ____________________________
Then ____________________________
Did you require insurance coverage ____________________________
How much ____________________________

NEIGHBORHOOD INTERVIEW

Investigator(s) present ____________________________ ___________________________________________________
Case # ____________________________ Date ____________________________ Address of interviewee ____________________________
Name of interviewee ____________________________ DOB ____________________________ SS# ____________________________
Telephone # ____________________________ Location of interview ____________________________
How did you become aware of the fire at (loss location) ____________________________
Did you become aware of the fire before the fire department arrived ____________________________
Did you watch the fire ____________________________ Color of smoke ____________________________ Color of flames ____________________________
Did you smell anything (smoke, chemicals, wood, oil, etc.) ____________________________
Did you see anyone that lived/worked in the building ____________________________
Did you see any strange cars or people at the time of the fire ____________________________
Did you see anyone come out of the building before the fire ____________________________
When ____________________________
Do you know the owner of the building Tenants Employees ____________________________
Names of above ____________________________
If dwelling, was anyone home at time of fire ____________________________
If business, was business open or closed at time of fire ____________________________
Usual closing time ____________________________ Closing time on day of fire ____________________________
Who closed ____________________________ Who usually closed ____________________________
Was business (good, fair, poor) ____________________________
Were there any previous fires at this building ____________________________
Conditions of these fires ____________________________
Who did you talk to at time of fire (if at fire) ____________________________
Do you know the cause of this fire ____________________________ Rumors ____________________________
Last time you saw anyone at building before fire ____________________________
Condition of building before fire ____________________________ 6 mos. prior ____________________________
Problems with building: Vandals ________ Break-ins ________ Youths Loitering ________
Noise ________
Were there any landlord/tenant disputes ____________________________
Problems in neighborhood ____________________________
regarding: Building Occupants Owner ____________________________
Did you see any delivery trucks at building (in last year) ____________________________
Names of companies whose trucks were seen ____________________________
Do you know of any other information that was not asked ____________________________
EMPLOYEE INTERVIEW

Investigator(s) present ____________________________

Case # ____________________________ Date ____________________________ Name of business (location of loss) ____________________________

Address of business ____________________________

Name of employee ____________________________ Address ____________________________

Telephone no. ____________________________ DOB ____________________________ SS# ____________________________

How long have you been employed by this firm ____________________________

Full time ________ Part time ________ Title or job ____________________________

Who managed the business ____________________________ Home address ____________________________

Who owned the business ____________________________

Who had key to the building ____________________________ Business ____________________________

Keys to specific areas of business or building ____________________________

Who usually opened the building ________ Who closed the building ________

Did you work on day of fire (or day after) ________ Day before ________

Did you notice anything unusual ________ Smells ________

Case ________ Any work begun lately ________

On day of fire, who opened ________ Who closed ________

Who takes receipts to bank ________ On day of fire ________

Names of last people to leave the building or business ____________________________

How was business last 6 months ________ 1 month ________

Future plans for business before fire ____________________________

Do you know if the business will reopen ________ When ________ Where heard ________

What area of the building did you work in ________ With who ________

Times you were at work: Start ________ End ________ Overtime ________

Days that you usually work ________

Supplies: have they been increasing/decreasing ________ When was change ________

How did you become aware that there was a fire ________

Where were you when you learned of fire ________

With who ________ Did you go to the fire ________

With who ________ Who did you see there ________

Who did you talk to ________

Do you know how the fire started ________ Rumors ________

Were there any flammables stored in building ________

Where were they stored ________

What were they for ________ Who used them ________

Do you know if the owner or any other employees ever received threats from anyone ________ Who ________ When ________ From whom ________

Do you plan to return to work there ________ When ________

Were there any previous fires at this business ________

Circumstances ____________________________

Names of suppliers ____________________________

When were these goods usually delivered ________

Are there any problems with these suppliers ________

Where are these supplies or goods stored ________

Who accepts deliveries ________

How often are you paid ________ Any problems getting paid ________

Have any new employees been hired in last few months ________

Have any employees been terminated or laid off in last few months ________

Were there any employer or employee disputes ________

Details ____________________________

How did you like working here ________ Why ________

Has business increased or decreased over last few months ________

How much ________ (estimate) ________

Do you know the owner of the building (if different than owner of business) ________ Comments on owner or ownership ________

Comments on how the business is run ________

Names of other employees (include addresses if known) ________

Comments on working conditions ________

Any renovations made in last year (what, who did work) ________

Other pertinent questions: ________
# CASE CHECKLIST

<table>
<thead>
<tr>
<th>Operation No.</th>
<th>Date received</th>
<th>Assigned to</th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
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<table>
<thead>
<tr>
<th>Two-week preliminary report</th>
<th>Date mailed</th>
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<tbody>
<tr>
<td>Due</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Four-week interim report</th>
<th>Date mailed</th>
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<tbody>
<tr>
<td>Due</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Inactive Date</th>
<th>Closed date</th>
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<td></td>
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<table>
<thead>
<tr>
<th>Site Inspection</th>
<th></th>
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<tbody>
<tr>
<td>Neighborhood Surveys</td>
<td></td>
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<tr>
<td>Employee/Tenant Interviews</td>
<td></td>
</tr>
<tr>
<td>P.D./F.D. Reports/Interviews</td>
<td></td>
</tr>
<tr>
<td>Fire Marshal, State Chemist</td>
<td></td>
</tr>
<tr>
<td>Reports/Interviews</td>
<td></td>
</tr>
<tr>
<td>Background of Principals</td>
<td></td>
</tr>
<tr>
<td>Creditor/Supplier Interviews</td>
<td></td>
</tr>
<tr>
<td>Alarm Company Records/Interviews</td>
<td></td>
</tr>
<tr>
<td>Corporate/Records Checks</td>
<td></td>
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<tr>
<td>Insured(s) Interview</td>
<td></td>
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<tr>
<td>Suspect(s) Interview</td>
<td></td>
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<tr>
<td>Insurance Agent Interview</td>
<td></td>
</tr>
<tr>
<td>Insurance Company Adjuster Interview</td>
<td></td>
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<tr>
<td>Bank Interview</td>
<td></td>
</tr>
<tr>
<td>Mortgage(s) Interview</td>
<td></td>
</tr>
<tr>
<td>Proof of Loss</td>
<td></td>
</tr>
</tbody>
</table>

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**TACTICAL GUIDE TO ARSON-FOR-PROFIT ENFORCEMENT**

**Financial Investigation of Arson-for-Profit**

by Loretta Campbell, Special Agent
Criminal Investigation Division
Internal Revenue Service
San Diego, California
An introduction to accounting and financial investigation.
century, people began to improvise ways of making them more meaningful—short of becoming a trained accountant.

One tool which has emerged is called "Ratio Analysis." It can help an arson investigator cut through the complexity of financial statements to the meat of the matter—circumstantial evidence of a crime. The tool can be used to predict or diagnose business failure leading to arson; it can also help to pinpoint the duration, severity, and even some of the causes of a business failure.

During an investigation of arson, the investigator might want to know if the business was under-capitalized and over-indebted. Was it paying its bills promptly? Was it making a profit? Was the merchandise selling before it spoiled? Did the owner take a large salary?

In general, ratio analysis of financial statements can help the investigator answer these and many more questions about the financial condition of a business before an arson fire. Ratio analysis presumes that one aspect of business, i.e., having cash, will have an impact on another aspect of business, i.e., paying bills. If this relationship is true, then expressing the amount of bills currently owing as a percentage of cash would permit the investigator to conclude whether the business will be able to pay its bills promptly or not.

Ratio analysis seeks to express the relationship between various aspects of business as pictured in the financial statements. One aspect of business is usually expressed as a percentage of another. Given the common elements of doing business, the ratio permits conclusions to be drawn about the financial health of the business under investigation. For example, using ratio analysis, the investigator can determine whether the business has enough cash to pay its bills promptly, whether it can borrow money, and whether it is selling its inventory. If it can not do any of this, the investigator can conclude that the business is likely to fail and that its assets will have to be sold to pay its creditors. In some cases, it is possible to pinpoint the time when the business first began to show signs of financial sickness. Occasionally, the causes of business failure can be determined, such as when the owner draws too much cash out of the business to permit it to operate successfully.

When an arson investigator possesses financial statements even for a single time period, ratio analysis can be performed. Each ratio calculation will result in a numerical expression of some financial aspect of a particular firm. By comparing the ratio result to a variety of "standards" or norms, inferences can be made about the financial condition of the firm. In general, there are three common standards to which most ratio results can be compared: (1) to the "rule of thumb" standard, (2) to previous financial condition, or (3) to the "rule of thumb" standard. A fourth standard may exist if the business is part of a regulated industry; comparison to the regulatory standard may be made.

The first common comparison can be called "intra-period" ratio analysis. To perform this analysis, an investigator needs only the financial statements for a single time period. Conclusions regarding the financial condition of a particular firm are usually reached by comparing the ratio result to "rule of thumb" standards. Although intra-period analysis is the oldest and best known technique, it is subject to two serious criticisms. First, the financial statements might contain significant misstatements; the financial condition reported by the statements for a single time period might not be typical. Second, businesses within different industries face different financial demands, due to both the nature of the business and the size of the firm. Inter-period analysis is considered a better tool than intra-period analysis because it may point out unusual financial performance or misstatements. An arson investigator must have the financial statements for two or more time periods to be able to use inter-period ratio analysis; if they are not available, the comparison cannot be made. Furthermore, inter-period analysis cannot overcome the second serious criticism of intra-period ratio analysis.

"Inter-firm" ratio analysis is a tool which has been devised to counter the criticism that no single standard of financial health is appropriate for all kinds of businesses. It recognizes that firms within different industries face different financial demands, due to both the nature of the business and the size of the firm. Inter-firm analysis is generally considered better than intra-period analysis; inter-firm analysis is not usually compared to inter-period analysis. Inter-firm and inter-period analysis are often used together to obtain a complete picture of financial condition. The most serious problem faced by an investigator using the inter-firm analysis is finding a reliable source of industry information by line of business about truly comparable firms. Fortunately, many sources of industry information exist.
Chart I shows eight ratios which might prove especially useful to an arson investigation. The ratios have been grouped into three categories which are important to the financial condition of most businesses: liquidity, leverage, and inventory management. Comments are made about each relative to intra-period, inter-period, and inter-firm analysis. Each term and concept will be discussed in the remainder of this paper.

Ratio Analysis is not a perfect tool, however. It must be used with caution for several reasons. First, the relationships expressed by ratios are only crude measures of performance and efficiency. There may be imperfections in the assumptions about the relationships between various aspects of business. There may also be errors in the financial statements of any given business ranging from typographical to gross misstatements. Obviously, such errors affect the conclusions reached using ratio analysis. Second, the conclusions drawn from ratio analysis will result, at best, in circumstantial evidence. They still do not prove who struck the match in an arson fire; however, they can be extremely useful as corroborative evidence or for pinpointing areas of further investigation. In many cases, the problem areas disclosed by ratio analysis are good candidates for deposition or interrogatory questions.

II. FINANCIAL STATEMENTS

Ratio analysis is a tool that requires that financial statements be available. Although the statements are not always readily available to the investigator, they are often available from witnesses. Banks nearly always require financial statements of a business to be submitted with a loan application. Insurance agents request them for use in making decisions as to the best policies for the client. Many business associates, particularly suppliers, demand statements before trading with the firm. Some country clubs require that members submit financial statements with applications. Accountants who prepare the statements retain copies.

One of the most common financial statements is the Statement of Financial Position, commonly called the "balance sheet." The balance sheet is comparable to a photograph of the finances of the business at a particular point in time. Just as the photograph of a child hitting a baseball stops the motion for a moment, the balance sheet of a business "stops the motion" to capture the financial picture of a business at a particular time. The photograph of the child does not show the ball being pitched or the child running to first base; the balance sheet does not show the business moving towards its financial condition nor does it show the course of the business after the date of the statement. The balance sheet shows only
### INTER-FIRM ANALYSIS

(see pp. 293-294)

<table>
<thead>
<tr>
<th>General Remarks</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Considered better indicators of financial position than intra-period analysis</td>
<td>1. Truly comparable businesses may not exist</td>
</tr>
<tr>
<td></td>
<td>2. Recognizes differences between industries</td>
<td>2. Does not permit ready detection of errors and irregularities</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liquidity Ratios</th>
<th>Current Ratio = Current Assets / Current Liabilities&lt;br&gt;Many sources of information exist by line of business because this ratio is so well known.</th>
<th>Quick Ratio = Quick Assets / Current Liabilities&lt;br&gt;Some sources of information exist by line of business but fewer sources are available than for the current ratio.</th>
<th>Cash-to-Daily Expenses = Cash / Average Daily Expenses&lt;br&gt;Almost no sources of information exist by line of business. Local experts may be used.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leverage Ratios</td>
<td>Total Debt-to-Assets = Total Liabilities / Owner's Equity&lt;br&gt;Many sources of information exist by line of business for large-sized firms.</td>
<td>Total Debt-to-Assets = Total Liabilities / Total Assets&lt;br&gt;Many sources of information exist for both small- and large-sized businesses.</td>
<td>Inventory-to-Total Assets = Inventory / Total Assets&lt;br&gt;Many sources of information exist by line of business for firms of all sizes.</td>
</tr>
<tr>
<td>Inventory Turnover</td>
<td>Inventory Turnover Ratio = Cost of Merchandise Sold / Inventory&lt;br&gt;Quite a few sources of information exist for larger-sized businesses.</td>
<td>Inventory Holding Period = Number of Days in Period&lt;br&gt;Inventory Turnover Ratio = Inventory Turnover Ratio / Days in Period&lt;br&gt;Some sources of information exist by line of business, especially for larger-sized firms.</td>
<td></td>
</tr>
</tbody>
</table>
### INTER-PERIOD ANALYSIS

**General Remarks**

**Advantages:**
1. Considered better indicators of financial position than intra-period analysis
2. Permits ready detection of errors and irregularities

**Disadvantages:**
1. Need financial statements for more than one time period
2. Does not take into account differences between industries

### Liquidity Ratios

<table>
<thead>
<tr>
<th>Ratio</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Ratio</td>
<td>Current Assets / Current Liabilities</td>
</tr>
<tr>
<td>Quick Ratio</td>
<td>Quick Assets / Current Liabilities</td>
</tr>
<tr>
<td>Debt-to-Daily Expenses</td>
<td>Cash / Average Daily Expenses</td>
</tr>
</tbody>
</table>

The ratio results for each time period can be compared to the intra-period standard and to each other. If significant changes have occurred over time, changes in asset mix or debt structure should be investigated.

### Leverage Ratios

<table>
<thead>
<tr>
<th>Ratio</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Debt-to-Equity</td>
<td>Total Liabilities / Owner's Equity</td>
</tr>
<tr>
<td>Total Debt-to-Assets</td>
<td>Total Liabilities / Total Assets</td>
</tr>
</tbody>
</table>

The results for each time period can be compared to the intra-period standard and to each other. If significant changes have occurred over time, changes in the amounts of debt or assets should be investigated.

### Inventory Management Ratios

<table>
<thead>
<tr>
<th>Ratio</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory Turnover Rate</td>
<td>Cost of Merchandise Sold / Inventory</td>
</tr>
<tr>
<td>Inventory Holding Period</td>
<td>Number of Days in Period / Inventory Turnover Rate</td>
</tr>
<tr>
<td>Inventory-to-Total Assets</td>
<td>Inventory / Total Assets</td>
</tr>
</tbody>
</table>

The results for each time period can be compared to each other for likeness. If significant changes have occurred, changes in asset mix should be investigated.

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**CHART I (continued)**
the end result of all the events leading up to the financial position as shown in the statement. An example of a balance sheet is shown in Exhibit A.

The balance sheet for Sam's Hardware is divided into two main categories: the resources which a business possesses and the sources of funding of the business. The resources are called "assets"; the sources are credit or "liabilities" and net worth or "owner's equity." The balance sheet for Sam's Hardware demonstrates that the amount of total assets equals or "balances" the amount of total liabilities and owner's equity, hence the name balance sheet. By definition, the total resources must equal the amount of funding.

Assets are those resources acquired by a business which will give service to the firm in its future operations. Some common examples of assets are: cash which can be used to pay bills and make purchases, inventory which can be sold, buildings and equipment which can provide a place to do business, and patents which can result in a business having an edge over its competitors. The kinds of assets are as varied as there are businesses.

Within the balance sheet, assets are listed in their order of "liquidity." Liquidity is a measure of the ease with which the asset can be converted to cash. Cash is, obviously, the most liquid because it is already cash. The asset listed second on the balance sheet is considered to be the next most liquid, and so on. The last asset listed on the balance sheet is considered to be the hardest to convert to cash; the business would probably suffer permanent damage if that asset were sold and not replaced. For example, if a restaurant were to sell its stove, it could no longer continue to prepare meals. The firm would have to close because it could no longer perform the thing it was in business to do.

In order for a business to be healthy, however, it must have more than liquidity. It must also have earning power. Earning power comes from having a store and display racks or machines to make products. It comes from having merchandise on hand for customers to buy. Some assets are considered to provide a business with liquidity, others with earning power. No asset is considered to possess both liquidity and earning power. Chart II below demonstrates the relative liquidity and earning power of various kinds of assets.

The management of any particular firm must allocate money for assets having liquidity or earning power, since few businesses have so much money to spend that they can have unlimited amounts of both kinds of assets. In many instances, the nature of the business helps to determine the best "mix."
For example, a business that must acquire its stock months before it is sold must be more liquid (i.e., cash rich) than a business which buys its inventory only when a customer orders it. If management fails to properly allocate its assets, the business will fail sooner or later. Therefore, some of the ratios that are particularly pertinent to an arson investigation will seek to predict or diagnose a business failure on the basis of measures of liquidity. Accountants commonly subdivide assets into two categories: current assets and non-current assets. Current assets are those which will ordinarily be converted to cash in one year or less. Non-current assets are those which are expected to benefit the business for a long time. If they were sold, the business would be permanently harmed.

The liabilities of a business include all the debts owed to creditors. They include salaries and wages payable to employees, amounts payable to taxing authorities, accounts payable to suppliers and vendors, bank loans, bonds, etc.

Within the balance sheet the liabilities should be listed in order of their "subordination," that is, in the order in which creditors would be paid if the business folded. However, in fact, many financial statements do not list the liabilities in this order. Commonly, businesses categorize the debts simply on the basis of whether they will have to be paid within one year or less. Those debts that will fall due within one year are called "current liabilities." Those that will not fall due until after a year or more has passed are called "non-current liabilities." It is proper to include the amount of long term debt which will become payable during the current liabilities. For example, if a 30 year, $30,000 mortgage calls for principle payments of $3,000 during the next twelve months, $3,000 would be classified as a non-current liability. Current liabilities are usually paid or "satisfied" using current assets.

Net worth or the owner's equity is commonly described as being the difference between assets and liabilities. This notion is not entirely accurate. More properly, owner's equity consists of the amount of capital contributed by the owner(s) of the business plus the amount of operating profits or losses since its beginning minus any draws or dividends paid to the owner(s). The balance sheet for Sam's Hardware demonstrates the components of owner's equity. Each one of the elements of owner's equity subjects the business to certain legal restrictions, such as the payment of dividends.

Before ratio analysis techniques are applied to a balance sheet, the investigator should ascertain that the balance sheet is reasonably free of gross misstatements. Society puts a
great deal of reliance on the balance sheet in making economic
decisions. As a result, some businessmen are motivated to
mistrue or falsify the information contained in the balance
sheet. Sometimes the value of assets is overstated (too high)
and sometimes assets are listed which do not even exist.
Liabilities are sometimes understated (too low) by simply
omitting a real debt from the balance sheet. In either case,
the owner's equity of the business will be overstated (too
high) by definition. The investigator may choose to have an
accountant help evaluate the accuracy of the balance sheet
before ratio analysis is applied; the conclusions reached as a
result of applying ratio analysis can only be as good as the
financial statements.

The second most common financial statement is the Statement
of Operations or the so-called "income statement." The income
statement summarizes the revenues or sales, the expenses, and
the profit or loss earned during a particular period of time,
usually one year. The income statement may be considered a
detailed account of the owner's equity provided by operations
during a specified time period. The income statement for Sam's
Hardware is shown in Exhibit B.

The first major category of the income statement is sales.
Every business operates to earn revenue. Since this is
considered one of the most important goals of a business, it is
listed first on the income statement.

Often a product-type business will incur heavy expenses
acquiring merchandise to sell so a deduction is made from
revenues for the cost of the merchandise sold. The difference
between the sales and the cost of the merchandise sold is
called "gross profit." The amount of the gross profit is what
is left to cover other kinds of business expenses. Sam's
Hardware is a merchandising business, so it makes such a
calculation. Another kind of business, a service-type
business, will not ordinarily make the gross profit calculation.

Both product-type and service-type businesses will list the
general, administrative, and selling expenses incurred in
operations. Sam's Hardware lists nine different kinds of
expenses; some businesses list few, most list many more.
Total expenses are deducted from gross profits or total
revenues depending on the format of the income statement; the
difference is called "net income" or "net loss." Net income
results if revenues are higher than all the costs of doing
business. Net loss occurs if the costs of doing business exceed the revenues of the firm.

Net income or loss is reflected on both the income
statement and the balance sheet of a business as part of

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EXHIBIT B
SAM'S HARDWARE COMPANY
Income Statement
Year Ended 12/31/79

REVENUES:
Merchandise sales $620,000
Dividend income 1,000
Total Revenues $621,000

LESS:
Cost of merchandise sold 405,000
GROSS PROFIT $216,000

EXPENSES:
Salaries and wages $180,000
Fringe benefits 18,000
Utilities 3,000
Truck expenses 2,000
Entertainment & travel 2,000
Office expenses 6,000
Advertising 3,000
Interest expense 18,000
Depreciation expense 4,000
LESS: TOTAL EXPENSES $236,000

NET INCOME (LOSS) ($20,000)
owner's equity (earned capital). Because of the reliance placed on the balance sheet by society, some businessmen try to improve the appearance of their businesses by misstating the net income of the firm. This is done by overstating revenues or by understating expenses. For example, several years ago Rolls Royce Company was experiencing some financial trouble. However, even expert financial analysts were surprised when the business failed because its financial statements had "looked so good." With hindsight, it was discovered that the business had used an accounting procedure improperly. The procedure resulted in the overvaluation of assets, the understatement of expenses, and the consequent overstatement of owner's equity. Therefore, it is just as important for the investigator to assure that the income statement is realistic before applying ratio analysis techniques as it is to assure the accuracy of the balance sheet.

III. APPLICATION OF RATIO ANALYSIS

Once it has been determined that the financial statements of a business are realistic, analysis of the financial relationships of the business can begin. Ratio analysis can be applied in several different ways. Each way results in viewing the business from a slightly different angle; taken individually, each method has some strengths and some weaknesses. Taken together, the methods provide a comprehensive look at the business. In spite of the desirability of using all the techniques together, it is often impossible for the investigator to do so because of the lack of information and time limitations.

In general, any detail of the financial statement can be compared to:

1. any other bit of detail within financial statements prepared for the same time period (intra-period analysis);
2. the same item appearing in the financial statements of a different business (inter-firm analysis);
3. the same item appearing in the financial statements of a different period (inter-period analysis); and
4. regulatory standards, if they exist.

Each of these different methods of application will be examined in turn.

A. Intra-period analysis

Intra-period ratio analysis examines the relationships between one account or group of accounts and other accounts or groups of accounts listed in the same financial statement.
Each of them will be discussed in turn. The investigator should keep in mind that there are numerous different formulas for calculating each ratio. The following discussions will deal with common formulas, but in every case other formulas do exist. Each different formula yields a slightly different measurement and subjects the ratio to slightly different interpretations.

The most widely recognized measure of liquidity is the current ratio. This ratio presumes that current assets will be converted to cash, and that the cash will be used to pay off current liabilities as they fall due. Therefore, a healthy business is one which has enough current assets to pay off its current liabilities plus a good margin for safety. This ratio is commonly accepted as a measure of solvency or insolvency and as a predictor of bankruptcy.

The current ratio is calculated by dividing current assets by current liabilities. Current assets ordinarily include cash, marketable securities, accounts receivable, inventory, and prepayments of office supplies, insurance, etc. Current liabilities ordinarily include taxes, salaries, and accounts payable, plus the current portion of long-term debts such as mortgages. Using the balance sheet for Sam’s Hardware, the ratio would be calculated as follows:

\[
\text{Current assets} = \frac{\$227,000}{\text{Current liabilities}} = 81\%
\]

This balance sheet shows that current assets amount to only 81% of current liabilities. Usually, a firm is considered to have a healthy liquidity position if current assets total twice the amount of current liabilities (200% or 2:1). Sam’s actually has fewer current assets than liabilities implying that this business will not be able to pay its debts as they fall due. Sam’s has to find some long-term financing, sell an interest in the business, or run the large risk of bankruptcy.

The use of a rule-of-thumb standard (i.e., current assets should be twice the amount of current liabilities) can be somewhat misleading. For instance, many businesses have excellent lines of credit which, by accounting rules, do not show up on the balance sheet. Such lines of credit can be used to cure a condition of technical insolvency and remove business failure as a motive for arson. Furthermore, not all the debts will have to be paid off using cash because even as some debts are paid, new ones will be created. In other words, businesses ordinarily exchange one debt for another reducing the need for cash. Finally, businesses in different industries have differing liquidity requirements based on the nature of their business practices. Businesses in some industries need a current position much greater than the 2:1 standard; firms in other industries do not need that much.

There is one special case where the current ratio may not reveal a troubled financial condition when one truly exists. If a business has begun to sell its productive assets, it may raise a lot of cash by sacrificing future operations. In this instance, the investigator should study the asset “mix” to determine if the business is solvent at the expense of future production.

The term “asset mix” refers to the variety of assets or groups of assets controlled by a firm. Various assets have different properties or characteristics which enable a firm to meet the financial demands placed upon it. To survive, a business must have assets which permit the orderly payment of bills and assets which enable the firm to generate revenues. The term “asset mix” is neutral, per se; it does not denote the proper allocation of assets to meet the various needs of a business. To determine whether a particular firm has a good asset mix, the needs of the business must first be identified.

The asset mix of a firm may change in anticipation of business failure and an arson fire. When cash is insufficient to pay bills, a businessman may be tempted to sell the productive assets of the firm, such as the machinery and equipment. While this enables the business to pay its bills for a little while, it deprives the firm of the ability to continue to produce and sell merchandise in the future.

A more stringent test of liquidity is the “acid test” or quick ratio. Quick assets consist of cash or assets which are convertible to cash in about 30 days. Ordinarily, quick assets include cash, marketable securities, and accounts receivable. Inventory and prepayments are current assets which are not quick assets. The formula for the quick ratio calls for quick assets to be divided by current liabilities.

Sam’s Hardware holds all three kinds of quick assets: cash, marketable securities, and accounts receivable. Since the balance sheet is arranged in order of liquidity, it is not surprising that the quick assets are the first three assets listed. In this case, the formula is:

\[
\text{Quick assets} = \frac{\$25,000}{\text{Current liabilities}} = 96\%
\]

Cash, marketable securities, and accounts receivable total only 96% of Sam’s current liabilities. A rule-of-thumb standard for the quick ratio is 1:1 (100% or equality). This measure confirms that Sam’s is in dire need of some cash. In fact, the
liquidity position as indicated by the current and quick ratios seems so poor that prudent lenders or investors would shy away. Bankruptcy seems inevitable; this business appears to be a candidate for an arson fire.

A newer measure of liquidity (which has not yet gained wide-spread popularity) is particularly applicable to the investigation of white-collar crime, including arson. This ratio is "cash-to-daily expenses." It purports to measure the speed with which continuing operations consume cash.

There are two advantages to using this ratio, especially in combination with one or both of the other liquidity ratios discussed. First, both the current ratio and the quick ratio measure the ability of a business to pay its debts as they fall due. This represents only half of the solvency issue; to be solvent, the firm must also be able to finance its daily operations. Using both the current or quick ratio and the cash-to-daily expenses ratio considers both the requirements of solvency. Second, the cash-to-daily expenses ratio provides a good idea of the life expectancy of a severely troubled firm.

This ratio is calculated using information from both the income statement and the balance sheet. In order to calculate this ratio, the investigator must have both primary financial statements, and they must cover the same time period. Sam's Hardware, for example, has cash amounting to $5,000. Its expenses include $405,000 for cost of merchandise sold, and $236,000 for other kinds of expenses totalling $641,000 for the entire year, including depreciation expense of $4,000. Depreciation expense is a special accounting category that never, by definition, requires the expenditure of cash. Therefore, this expense should be excluded for the purpose of calculating the ratio. Reducing expenses ($641,000) by depreciation expense of $4,000, leaves $637,000 requiring the use of cash. This figure ($637,000) is divided by the number of days in the income statement period (365). The result is $1,745 per day. This is the average amount of cash consumed daily by operations. The ratio is completed by dividing cash available by the average daily consumption of cash as follows:

Cash = $5,000
Avg. daily expenses = $1,745

This ratio demonstrates that there is only enough cash available to finance operations for about three days, assuming that expenses are running about the same now as they did during the financial statement period. This implies that on-going activities are being financed out of daily sales. Such a situation puts any firm into a precarious financial position; combined with the lack of bill paying ability demonstrated by both the current and the quick ratios, failure is likely to occur soon.

As important as liquidity is for predicting or diagnosing insolvency and subsequent bankruptcy, a firm can cure a poor liquidity position by additional borrowing or by the sale of capital. The availability of these cures is important to the investigation of arson motivated by business failure especially when the liquidity ratio results are inconclusive.

Traditionally, potential lenders and investors evaluate the business using intra-period ratios best described as "leverage" ratios. Leverage is the term used to describe the debt structure of the firm. It is a measure of the extent to which the firm is financed by debt rather than equity. A certain amount of leverage is considered to be desirable; too much debt can prevent a business from obtaining more loans, too little can prevent investors from investing capital. Too much borrowing subjects the business to high mortgage and interest payments, making business even more risky. Furthermore, when there is a lot of debt, some creditors can be expected to impose restrictions on management options. However, investors want to see some debt because it means that creditors are assuming some of the normal business risks for the owner. A highly leveraged firm is one that has a lot of debt and only a little owner's equity.

On occasion, the investigator might encounter a situation where the liquidity ratios of a business are poor but the leverage ratios are good. In these situations it can probably be concluded that the business has a cash bind, but that it can be cured by additional borrowings. In instances when a business is created solely to defraud an insurance company, one would expect that both the liquidity ratios and the leverage ratios would be poor.

A liquidity ratio is considered poor when cash and near-cash assets are insufficient to pay obligations as they fall due. Leverage ratios are considered as poor when creditors have funded a majority of the business. Both poor liquidity and poor leverage ratios connote a disproportionately large amount of debt. It follows that a businessman seeking to defraud an insurance company from the outset would seek defraud an insurance company from the outset would seek to finance an undue amount of the business rather than commit his own assets to the venture. The businessman can sell the merchandise and equipment for cash, pocket the insurance proceeds, and profit doubly. It is doubtful that many creditors, if any, will be paid.

One of the most common leverage ratios is the "total debt-to-equity" ratio. It is calculated by dividing total debt
by owner's equity as expressed on the firm's balance sheet.
For Sam's Hardware, the calculation would be:

\[
\text{Total liabilities} = \frac{380,000}{\text{Owner's equity}} = \frac{380,000}{420,000}
\]

The calculation is not valid for Sam's Hardware because there is no owner's equity; the amount is a negative number. However, this standard does not take into account variations by industry; what is a good leverage ratio in one industry may be a poor ratio in another.

A rule-of-thumb standard for the total debt-to-equity ratio is 1:1 (100% or equality). Using this standard, the ideal business is one that is funded equally by creditors and owners. However, this standard does not take into account variations by industry; what is a good leverage ratio in one industry may be a poor ratio in another.

Another measure of leverage is the total debt-to-total asset ratio. This ratio measures the extent to which creditors are secured in the event of a business failure. The ratio is calculated using only balance sheet information. The formula for calculating this ratio using the information from Sam's balance sheet is:

\[
\text{Total liabilities} = \frac{380,000}{\text{Total assets}} = 1.136
\]

The commonly accepted standard for this ratio is 50%; that is, creditors have funded about half the assets and investors have funded the other half. A percentage higher than this means that the firm is highly leveraged; it may encounter difficulty in getting loans. Creditors have funded more than all of Sam's assets, meaning that creditors have funded some operating losses as well. Such a situation is very unstable; creditors will inevitably force the business into bankruptcy. An arson fire would not be surprising in these circumstances.

Liquidity and leverage ratios are useful in predicting or diagnosing business failure in order to imply a motive for an arson fire. There is another group of intra-period ratios which can provide an arson investigator with information about the subject of an arson fire, the inventory itself. Obviously, this is an area that can be of extreme importance to an arson investigation, especially when virtually all the physical evidence has gone up in smoke.

Stock or inventory of merchandise is a necessary part of the operations for an on-going business. Retail stores must have a sufficient stock of merchandise to satisfy their customers. Manufacturers must have enough raw materials on hand to keep the machines and employees busy. Even speculators hold "inventory" in the form of real estate investments or stock certificates. Without inventory, the business cannot continue to exist. Although having inventory is essential to doing business, a firm can tie up so much of its money in inventory that the other needs of the business must be neglected.

There are ratios which help to evaluate the effectiveness of inventory management. One of the most important inventory management ratios is called the "inventory turnover" ratio. It measures the number of times that inventory is completely sold out during a period of time (usually a year). Although there is not any standard or ideal for this ratio, a high figure indicates a successful marketing effort and assures the freshness of inventory. On the other hand, a low inventory turnover rate may indicate that customers do not want the merchandise, and that it stays on the shelves until it is no longer useful. A very low inventory turnover may indicate that the stock was virtually worthless before an arson fire. If the stock was insured for a large amount, a motive for arson may be implied.

The ratio is calculated by dividing the cost of merchandise sold which appears on the income statement by the inventory amount which appears on the balance sheet. For Sam's Hardware, the ratio is calculated as follows:

\[
\text{Cost of merchandise sold} = \frac{405,000}{\text{Inventory}} = 2 \text{ times}
\]

The merchandise at Sam's turns over completely about twice a year. This does not mean that every item in the store is sold, ordered, and sold again. It means that some items sell frequently, others may remain on the shelves for years. Sam's low turnover may indicate:

(1) The rate is normal for the industry where stock moves very slowly. This conclusion, however, does not sell
well with the poor performance indicated by other ratios.

(2) The inventory is actually present, but customers don't buy it. This would be supported by the poor results shown by other ratios. Interviews of customers or competitors might be warranted. Arson would not be unusual in this set of circumstances.

(3) The inventory is overvalued for financial statement purposes and probably overinsured as well. This set of circumstances might indicate that arson was planned from the very beginning.

Another inventory management ratio is the "inventory holding period." This ratio measures the average number of days that the merchandise stays in stock. Before this ratio can be calculated, the inventory turnover rate must be known.

To calculate this ratio, it is necessary for the investigator to determine the period of time the income statement covers in days. For example, the income statement for Sam's Hardware covers one year (365 days); the time period is indicated in the heading of the income statement. The holding period is actually calculated by dividing the number of days by the inventory turnover rate as calculated above. For Sam's, this would be:

\[
\frac{\text{Number of days in period}}{\text{Inventory turnover rate}} = \frac{365 \text{ days}}{2 \text{ times}} = 182.5 \text{ days}
\]

The same conclusions can be drawn using either the inventory turnover rate or the inventory holding period. The result of inventory holding period might be more understandable by jury.

The final intra-period inventory management ratio is the "inventory-to-total assets" ratio. This ratio measures how much of the assets are held in the form of inventory. The ratio is calculated by using only the balance sheet; the amount of inventory is divided by the amount of total assets. For example, the ratio for Sam's Hardware would be calculated as follows:

\[
\frac{\text{Inventory}}{\text{Total assets}} = \frac{\$200,000}{\$338,000} = 59\%
\]

This ratio shows that 59% of all of Sam's assets are inventory, a high percentage. This squares with the poor results of the liquidity ratios. It is also consistent with the results of the inventory turnover rate and the holding period calculation. Inventory is the asset which is most likely to produce revenue for a firm, however, in Sam's case it is literally choking the business.

As useful as intra-period ratio analysis can be to an investigation of arson, it suffers from some real problems. Two of the most common criticisms are:

(1) Rule-of-thumb standards of performance are not perfect; performance can vary from industry to industry.

(2) Confining the analysis to only one time period means that the effects of unusual business events can distort the amounts shown on the financial statements and the conclusions drawn when ratio analysis is applied.

Fortunately, techniques of ratio analysis have been developed which counter each of these criticisms.

B. Inter-firm Analysis

Inter-firm ratio analysis has evolved in response to the first criticism. Inter-firm analysis refers to the comparison of the ratios calculated for different firms within the same industry. In other words, the ratios calculated for Sam's Hardware using the 1979 financial statements could be compared to the ratios for other hardware stores calculated on the basis of their 1979 financial statements. This technique is especially useful for drawing conclusions about the liquidity position of a particular business and its inventory management.

Despite the usefulness of the technique, it suffers from some problems of application. A business may be unique; geographical differences may make comparison meaningless; competitors may not wish to divulge confidential financial information. There are few, if any, means of overcoming the first two problems; there is a practical solution for the third one.

Comparative financial information by industry is available. Large businesses which sell capital shares publicly, publish financial statements yearly. Stock brokerages maintain complete libraries of annual reports. In addition, there are many other sources of industry information. As early as 1913, the Bureau of Business Research at Harvard University conducted a study of the expenses of shoe stores. Since then, studies have been done by trade groups, accounting firms, and educational institutions. These groups gather information, assemble it, and compile it into meaningful statistics, often using the same intra-period ratio formulas discussed earlier.

Two of the most widely known industry studies are published annually as a by-product of another business. Dunn and Bradstreet, a credit rating service, has been publishing "Key
Business Ratios* since 1932. The ratios are prepared for 22 lines of retailing, 32 lines of wholesaling, and 71 lines of manufacturing. Robert Morris and Associates is an association of bank loan and credit officers. The association prepares ratio studies annually for more than 350 lines of businesses and publishes them in the "Annual Statement Studies." Other sources of industry information are listed in Appendix I.

Many other sources of information exist by line of business. Some of these are listed in Appendix I. The Accounting Corporation of America and the Bank of America publish information about small businesses. The National Cash Register Company compiles information about particular industries is vast and varied. Appendix I includes a brief description of each of these sources of information along with mailing addresses.

Because of unique differences in the economic climate of various parts of the country, it may be necessary to develop local sources of information. Trade associations, licensing or regulatory agencies, labor unions, and local colleges may all have employees who are experts about local business conditions.

C. Inter-period Analysis

Inter-period ratio analysis has been developed in response to the second criticism of intra-period ratio analysis. Inter-period ratio analysis is also known as trend analysis. Basically, the financial statements of one firm are compared for more than one period of time, and the changes are analyzed. Inter-period ratio analysis is useful because it examines only one business over several continuous time frames, comparable to a moving picture. Just as a movie is more informative than a photograph, inter-period analysis is more informative than analysis confined to one instance. The technique is especially suitable for spotlighting trends in financial condition. Using inter-period ratio analysis, it is possible to determine if a firm is suffering from an ever tightening cash position, whether it is borrowing increasingly, or if inventory is building up. The main drawback of the device is the difficulty that law enforcement may encounter in getting the financial statements for more than one period of time.

Once the financial statements for two or more time periods are obtained, the intra-period ratios discussed earlier are applied to each time period. The results are then compared to determine if there have been any significant changes between periods. If movements are noted over time, then a trend pattern may be emerging.

It is possible to compare the absolute dollar amounts of detail appearing in financial statements for more than one time period. However, it is not considered proper to do so. During periods of inflation, the value of the dollar changes, and the comparison becomes distorted to the extent that the dollar has decreased in value. To avoid the bias of inflation, ratios should be used.

Some firms prepare "comparative" balance sheets and income statements. The term "comparative" denotes a financial statement which contains information for more than one time period. The information for each period is listed in the appropriate date column. Comparative financial statements are excellent sources of information for inter-period ratio analysis. Exhibit C is a comparative balance sheet. Exhibit D is a comparative income statement. Exhibit E shows the calculation of the inter-period ratios.

Exhibit E shows that the current ratio has worsened in the later period as has the quick ratio. The amount of cash on hand is less than the year before, but the amount of daily expenses has increased. It will be much harder for this business to pay its debts as they fall due and to continue to finance its operations; the business is closer to failure than a year ago. In the meantime, some new source of borrowing has been found. The firm is more highly leveraged in the latter period. The measures of inventory management show that inventory has built up from the previous period, and that it is still being held a long time before being sold. Every measure shows deterioration. The consistent pattern of all the measures should reassure the investigator that no isolated business event is distorting the financial statements.
### Exhibit C
**Sam's Hardware Comparative Balance Sheets**
As of 12/31/79 and 12/31/78

<table>
<thead>
<tr>
<th></th>
<th>12/31/79</th>
<th>12/31/78</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Current Assets:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>$5,000</td>
<td>$15,000</td>
</tr>
<tr>
<td>Marketable securities</td>
<td>5,000</td>
<td>10,000</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>15,000</td>
<td>13,000</td>
</tr>
<tr>
<td>Inventory</td>
<td>200,000</td>
<td>185,000</td>
</tr>
<tr>
<td>Office supplies</td>
<td>1,000</td>
<td>1,500</td>
</tr>
<tr>
<td>Pre-paid fire insurance</td>
<td>1,000</td>
<td>1,500</td>
</tr>
<tr>
<td><strong>Total Current Assets</strong></td>
<td>$227,000</td>
<td>$226,000</td>
</tr>
<tr>
<td><strong>Non-current Assets:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land and building</td>
<td>$75,000</td>
<td>$77,000</td>
</tr>
<tr>
<td>Equipment</td>
<td>25,000</td>
<td>26,000</td>
</tr>
<tr>
<td>Truck</td>
<td>10,000</td>
<td>11,000</td>
</tr>
<tr>
<td>Organization costs</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td><strong>Total Non-current Assets</strong></td>
<td>$111,000</td>
<td>$115,000</td>
</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td>$338,000</td>
<td>$341,000</td>
</tr>
</tbody>
</table>

|               |          |          |
| **Liabilities and Owner's Equity:** |          |          |
| **Liabilities:** |          |          |
| Current Liabilities: |          |          |
| Taxes payable | $10,000  | $7,000   |
| Salaries payable | 15,000  | 15,000  |
| Accounts payable | 175,000 | 181,000  |
| Current portion: Bank note | 75,000 | 50,000 |
| Mortgage       | 5,000    | 5,000    |
| **Total Current Liabilities** | $280,000 | $258,000 |
| Non-current Liabilities: |          |          |
| Long-term bank note | $75,000 | $75,000  |
| Long-term mortgage | 25,000  | 38,000   |
| **Total Non-current Liabilities** | $100,000 | $105,000 |
| **Total Liabilities** | $380,000 | $363,000 |

|               |          |          |
| **Owner's Equity:** |          |          |
| Contributed capital | $10,000 | $10,000 |
| Retained earnings (deficit) | (52,000) | (32,000) |
| **Total Owner's Equity** | $(42,000) | $(22,000) |
| **Total Liabilities and Owners Equity** | $338,000 | $341,000 |

### Exhibit D
**Sam's Hardware Comparative Income Statement**
Years Ended 12/31/79 and 12/31/78

<table>
<thead>
<tr>
<th></th>
<th>12/31/79</th>
<th>12/31/78</th>
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</thead>
<tbody>
<tr>
<td><strong>Revenues:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Merchandise sales</td>
<td>$620,000</td>
<td>$710,000</td>
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<tr>
<td>Dividend income</td>
<td>1,000</td>
<td>2,000</td>
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<tr>
<td><strong>Total Revenues</strong></td>
<td>$621,000</td>
<td>$712,000</td>
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<tr>
<td><strong>Less:</strong></td>
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<tr>
<td>Cost of merchandise sold</td>
<td>405,000</td>
<td>495,000</td>
</tr>
<tr>
<td><strong>Gross Profit</strong></td>
<td>$216,000</td>
<td>$217,000</td>
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</table>

<table>
<thead>
<tr>
<th></th>
<th>12/31/79</th>
<th>12/31/78</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Expenses:</strong></td>
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</tr>
<tr>
<td>Salaries and wages</td>
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<td>$170,000</td>
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<tr>
<td>Fringe benefits</td>
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<td>17,000</td>
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<tr>
<td>Utilities</td>
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<tr>
<td>Truck expenses</td>
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<tr>
<td>Entertainment and travel</td>
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<td>2,000</td>
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<tr>
<td>Office expense</td>
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<tr>
<td>Advertising</td>
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<td>Interest expense</td>
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<tr>
<td>Depreciation expense</td>
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<td><strong>Total Expenses</strong></td>
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<td>$224,000</td>
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<tbody>
<tr>
<td><strong>Net Income (Loss)</strong></td>
<td>($20,000)</td>
<td>($7,000)</td>
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### Exhibit C

**SAM'S HARDWARE**

**COMPARATIVE BALANCE SHEETS**

As of 12/31/79 and 12/31/78

<table>
<thead>
<tr>
<th></th>
<th>12/31/79</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>ASSETS:</strong></td>
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<tr>
<td>Current Assets:</td>
<td></td>
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<tr>
<td>Cash</td>
<td>$5,000</td>
<td>$15,000</td>
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<tr>
<td>Marketable securities</td>
<td>5,000</td>
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<tr>
<td>Accounts receivable</td>
<td>15,000</td>
<td>13,000</td>
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<tr>
<td>Inventory</td>
<td>200,000</td>
<td>185,000</td>
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<td>Office supplies</td>
<td>1,000</td>
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<td>1,500</td>
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<tr>
<td>Total Current Assets</td>
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<td>$226,000</td>
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<tr>
<td>Non-current Assets:</td>
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<tr>
<td>Land and building</td>
<td>$75,000</td>
<td>$77,000</td>
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<tr>
<td>Equipment</td>
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<td>26,000</td>
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<tr>
<td>Truck</td>
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<td>11,000</td>
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<tr>
<td>Organization costs</td>
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<td>Total Non-current Assets</td>
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<tbody>
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<td><strong>LIABILITIES AND OWNER'S EQUITY:</strong></td>
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</tr>
<tr>
<td>Current Liabilities:</td>
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<td></td>
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<tr>
<td>Taxes payable</td>
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<td>$7,000</td>
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<tr>
<td>Salaries payable</td>
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<tr>
<td>Accounts payable</td>
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<td>181,000</td>
</tr>
<tr>
<td>Current portion: Bank note</td>
<td>75,000</td>
<td>50,000</td>
</tr>
<tr>
<td>Mortgage</td>
<td>5,000</td>
<td>5,000</td>
</tr>
<tr>
<td>Total Current Liabilities</td>
<td>$280,000</td>
<td>$258,000</td>
</tr>
<tr>
<td>Non-current Liabilities:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long-term bank note</td>
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<td>$75,000</td>
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<td>Long-term mortgage</td>
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<td>30,000</td>
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<td>Total Non-current Liabilities</td>
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<td>$105,000</td>
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<tr>
<td><strong>TOTAL LIABILITIES</strong></td>
<td>$380,000</td>
<td>$363,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>12/31/79</th>
<th>12/31/78</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OWNER'S EQUITY:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contributed capital</td>
<td>$10,000</td>
<td>$10,000</td>
</tr>
<tr>
<td>Retained earnings (deficit)</td>
<td>(12,000)</td>
<td>(15,000)</td>
</tr>
<tr>
<td><strong>TOTAL OWNER'S EQUITY</strong></td>
<td>$(22,000)</td>
<td>$(22,000)</td>
</tr>
<tr>
<td><strong>TOTAL LIABILITIES AND OWNERS EQUITY</strong></td>
<td>$338,000</td>
<td>$341,000</td>
</tr>
</tbody>
</table>

### Exhibit D

**SAM'S HARDWARE**

**COMPARATIVE INCOME STATEMENT**

Years Ended 12/31/79 and 12/31/78

<table>
<thead>
<tr>
<th></th>
<th>Year Ended 12/31/79</th>
<th>Year Ended 12/31/78</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REVENUES:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Merchandise sales</td>
<td>$620,000</td>
<td>$710,000</td>
</tr>
<tr>
<td>Dividend income</td>
<td>3,000</td>
<td>2,000</td>
</tr>
<tr>
<td><strong>Total Revenues</strong></td>
<td>$623,000</td>
<td>$712,000</td>
</tr>
<tr>
<td><strong>Less:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of merchandise sold</td>
<td>405,000</td>
<td>495,000</td>
</tr>
<tr>
<td><strong>GROSS PROFIT</strong></td>
<td>$218,000</td>
<td>$217,000</td>
</tr>
<tr>
<td><strong>EXPENSES:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salaries and wages</td>
<td>$180,000</td>
<td>$170,000</td>
</tr>
<tr>
<td>Fringe benefits</td>
<td>18,000</td>
<td>17,000</td>
</tr>
<tr>
<td>Utilities</td>
<td>3,000</td>
<td>2,500</td>
</tr>
<tr>
<td>Truck expenses</td>
<td>2,000</td>
<td>2,500</td>
</tr>
<tr>
<td>Entertainment and travel</td>
<td>2,000</td>
<td>2,000</td>
</tr>
<tr>
<td>Office expense</td>
<td>6,000</td>
<td>5,000</td>
</tr>
<tr>
<td>Advertising</td>
<td>3,000</td>
<td>6,000</td>
</tr>
<tr>
<td>Interest expense</td>
<td>15,000</td>
<td>15,000</td>
</tr>
<tr>
<td>Depreciation expense</td>
<td>4,000</td>
<td>4,000</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td>$236,000</td>
<td>$224,000</td>
</tr>
<tr>
<td><strong>NET INCOME (LOSS)</strong></td>
<td>$(20,000)</td>
<td>$(7,000)</td>
</tr>
</tbody>
</table>
EXHIBIT E
INTER-PERIOD RATIOS FOR SAM'S HARDWARE

LIQUIDITY RATIOS:

<table>
<thead>
<tr>
<th></th>
<th>1979</th>
<th>1978</th>
<th>CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Ratio:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current Assets</td>
<td>$227,000 = 81%</td>
<td>$226,000 = 88%</td>
<td>-7%</td>
</tr>
<tr>
<td>Current Liabilities</td>
<td>$280,000</td>
<td>$258,000</td>
<td></td>
</tr>
<tr>
<td>Quick Ratio:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marketable Securities</td>
<td>$25,000 = 9%</td>
<td>$30,000 = 15%</td>
<td>-6%</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>$280,000</td>
<td>$258,000</td>
<td></td>
</tr>
<tr>
<td>Current Liabilities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash-to-Daily Expenses:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1: Calculating total expenses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of Merchandise Sold</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Other Expenses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation Expense</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 2: Calculating daily expenses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Expenses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>365 Days</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 3: Cash-to-daily expenses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>$5,000 = 2.9</td>
<td>$15,000 = 8.9</td>
<td>-6% times</td>
</tr>
<tr>
<td>Daily Expenses</td>
<td>$1,745 times</td>
<td>$1,685 times</td>
<td></td>
</tr>
</tbody>
</table>

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EXHIBIT E (continued)

<table>
<thead>
<tr>
<th>LEVERAGE RATIOS:</th>
<th>1979</th>
<th>1978</th>
<th>CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Debt-to-Equity:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Liabilities</td>
<td>$380,000</td>
<td>$185,000</td>
<td>0</td>
</tr>
<tr>
<td>Owner's Equity</td>
<td>$(42,000)</td>
<td>$(22,000)</td>
<td></td>
</tr>
<tr>
<td><strong>Total Debts-to-Total Assets:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Liabilities</td>
<td>$380,000</td>
<td>$363,000</td>
<td>-5%</td>
</tr>
<tr>
<td>Total Assets</td>
<td>$338,000</td>
<td>$341,000</td>
<td></td>
</tr>
</tbody>
</table>

| INVENTORY MANAGEMENT RATIOS:                       |       |       |        |
| **Inventory Turnover Rate:**                       |       |       |        |
| Cost of Merchandise Sold per Inventory             | $405,000 | $495,000 | 0.7% |
| Inventory                                          | $200,000 | $185,000 |        |
| **Inventory Holding Period:**                      |       |       |        |
| Number of Days in Period                           | 365 days | 365 days | -47.5 days |
| Inventory Turnover Rate                            | 2 times | 2.7 times |        |
| **Inventory-to-Total Assets:**                     |       |       |        |
| Inventory                                          | $200,000 | $185,000 | -5%    |
| Total Assets                                       | $338,000 | $341,000 |        |
D. Regulatory Standards

A fourth means of interpreting the financial statements of a business involves the comparison of intra-period ratio results to regulatory standards, if they exist. When regulatory standards do exist, they are often expressed as a percentage, but few industries are regulated to any great extent.

IV. SUMMARY

Arson is all too often viewed by troubled businessmen as a solution to their financial problems. Other businessmen start firms solely as a means of defrauding insurance companies. As is true of other types of white-collar crimes, the financial statements of a business which has suffered an arson-for-profit fire can yield important investigative leads and/or circumstantial evidence of a crime. The problem becomes one of cutting through the confusion and complexity surrounding financial statements. One tool that is available to the arson investigator is Ratio Analysis. It expresses the relationships between various aspects of business as percentages; ratio analysis permits conclusions to be drawn based on the relationships which are presumed to exist. Ratio analysis is an important tool for the arson investigator, but it is not free from problems.

Ratio analysis must be applied to the financial statements of a particular business. One of the most common financial statements is the balance sheet. It shows the resources or assets controlled by a business, as well as the sources of funding or liabilities and owner's equity. The assets are listed in the order of liquidity or ease with which each can be converted to cash. Both assets and liabilities are grouped into current and non-current categories. Another of the most common financial statements is the income statement. It shows the revenues, expenses, and net income or loss for a particular segment of time. Once it has been determined that the financial statements of a business are reasonably accurate, ratio analysis may be applied.

Ratio analysis may be applied in any of four different ways including:

(1) Intra-period analysis,
(2) Inter-firm analysis,
(3) Inter-period analysis, or
(4) Comparison to regulatory standards.

Intra-period analysis compares various aspects of the same business as of the same period of time; the technique depends...
on the existence of certain predictive relationships which permit conclusions about the financial condition of the firms. The most common intra-period ratios involve measures of liquidity, leverage, and inventory management. Liquidity ratios are useful in predicting insolvency which leads to business failure. Leverage measures are useful for predicting whether a cure for insolvency is available. Inventory management ratios yield insight into an asset that is often the target of an arson fire.

Intra-period ratio analysis is criticized as being oversimplified; refinements of ratio analysis have emerged in response to this criticism.

Inter-firm analysis compares the financial position of one business at a particular period of time to that of other businesses within the same industry. Many sources of reliable information exist about lines of businesses. Inter-period ratio analysis spotlights trends in the financial position of one business over several periods of time. This technique eliminates the possibility of isolated business events from distorting the conclusions reached. Finally, the financial position of a business can be compared to regulatory standards, if any exist.

In addition to using ratio analysis to predict or diagnose insolvency, there are other signals of insolvency which do not depend on the use of financial statements. Reuben W. Abrams in his article, "Rehabilitation: The Accountant's Role" identifies many common danger signals of insolvency. For example, the arson investigator is likely to discover that there are many witnesses who would be able to testify that the business appeared to have a tight financial position. Suppliers might know that the business had been paying its bills only when they became past due, and that it never paid soon enough to receive the discount available for prompt payment. Employees, friends, or relatives might have been approached for a loan to keep the business going. The accounts receivable owed by the customers of the business might have been pledged to secure a loan or sold prior to their collection in the ordinary course of business. This is a commonly accepted indication of financial trouble because buyers are willing to pay only a fraction of the value of the accounts (usually 60 to 80%). When the accounts receivable are sold or pledged, a written contract is usually prepared and kept by the buyer. Sometimes the contract is recorded. One of the surest signs of insolvency is falling behind in payments to taxing authorities. Most businessmen will make payments for taxes before any other obligation because of the power of tax collectors to sell the business for back taxes. Tax liens for unpaid taxes are ordinarily recorded. Key employees who depart from the business might prove to have a lot of knowledge about the financial condition of the business before an arson fire. Some customers of the business might be able to testify that the firm was unable to fill orders because of insufficient or obsolete stock. Some of the customers of the business might even have been offered merchandise taken out the back door before a fire. Using the testimony of customers, it might be possible to prove that inventory was overinsured. Finally, newspapers and other reference materials might provide insight into the changing technology of an industry, labor strikes, product obsolescence, prohibition, or loss of major contracts which might put an already troubled firm out of business.
In prosecutions where the proof of insolvency is important circumstantial evidence of a crime such as arson, it may be necessary to hire an accountant as an expert witness. This, of course, presumes that the accounting books and records of the subject business are available to the investigator. The investigator will probably want to become involved with the selection of tests and procedures that will be performed by the accountant. In this way, the investigator can be assured that the job will get done in the most thorough and cost effective manner possible.

Reuben W. Abrams in his article which follows, "Rehabilitation: The Accountant’s Role," suggests a "program of examination" or an audit plan designed to detect insolvency. This audit plan is especially appropriate for the investigation of arson because it concerns itself with discovering hidden assets and improper diversions of assets from the business which frequently precede arson fires.

Many companies are experiencing financial difficulties as a result of inflationary factors and the economic slowdown. A properly qualified accountant can be instrumental in guiding a financially ill client back to health without incurring unnecessary costs, provided he recognizes the insolvency danger signals in time. (See table for danger signals.)

The accountant cannot be expected to perform miracles. By recognizing the problem and analyzing its causes, he should be in a position to suggest prompt and effective corrective action. He can also assist a financially distressed company by helping to implement and monitor a rehabilitation plan.

Assuming that after exploring all alternatives to bankruptcy, an arrangement or reorganization is necessary to rehabilitate a business, an accountant with the proper background can play an important role in the rehabilitation proceeding. He should be qualified to assist the debtor, the court, court appointed officers and the creditors’ committee in preserving assets, maximizing recoveries and developing or evaluating a workable plan of arrangement or reorganization.

Here is a bird’s eye view of the techniques and procedures followed by accountants in recommending business rehabilitation procedures.

A company which seeks an arrangement with its unsecured creditors and has se. securities outstanding with the public will choose Chap. 11 proceedings unless it seeks to adjust or affect the rights of its stockholders because of a problem or deadlock that may exist among them.

On the other hand, a public company could seek relief under either Chap. 10 or Chap. 11. In the usual case involving a medium-sized corporation, debtors file under Chap. 11 since they seek to adjust only their unsecured debt, leaving their public debentures, if any, and shareholders unaffected. Proceedings under Chap. 11 are usually more expensive than under Chap. 10.

In certain cases, the Securities and Exchange Commission has taken the position that it is in the best interest of the public, where shareholders or debenture holders are involved, to transfer a proceeding from Chap. 11 to Chap. 10. In such instances, the commission or any interested party may petition the court to transfer the proceedings to Chap. 10. If the judge is of the opinion that the proceedings should have been brought under
Chapter 10, he will enter an order dismissing the proceedings under Chapter 11, unless within such 90 days the petition is amended to comply with the requirements of Chapter 10. The debtor then has the option of either filing an amended proceeding under Chapter 10, or the Chapter 11 proceeding will be dismissed. If dismissed, creditors will have the right to file an involuntary proceeding under Chapter 11. If none of these proceedings is instituted, the proceeding will be dismissed and the debtor is an adjunct of creditors.

The court will generally use the criteria of what the debtor's needs are in determining whether or not proceedings should be transferred from Chapter 11 to Chapter 10. If the court believes a simple arrangement affecting only unsecured creditors is necessary to rehabilitate the debtor rather than a comprehensive reorganization, which usually rests the position of stockholders and security holders, the court will allow the proceedings to continue as Chapter 11.

One further point that must not be overlooked is that determination as to whether a debtor is properly within Chapter 10 or Chapter 11 can take place in either proceedings. If a debtor files under Chapter 10, he must state why he believes he cannot obtain adequate relief under Chapter 11. If the judge is of the opinion that adequate relief can best be obtained under Chapter 10, he will approve the petition in Chapter 10. Otherwise, he will direct a dismissal to Chapter 11.

The accountant's responsibility in preparing an accountant's report is usually recommended to the court by the creditors' committee in consideration of his proceeding and by the trustee in Chapter 10 proceedings. He is appointed by the court and although he acts as an agent of the creditors' committee and the trustee, he is a reporter of the court and owns his primary responsibility to the court. He strongly believes the accountant's role and obligations in dealing with debtors is similar to that of an internist and/or surgeon. By that I mean, he should be qualified to diagnose the ailments and the condition of the patient (debtor), determine if the problem was either self-inflicted or incurable, recommend appropriate procedures and hopefully oversee and/or replace them. Merely performing an autopsy on a patient who is still breathing is unacceptable.

The examination, the objectives of the creditors in the reorganization proceedings must be considered. If we assume the debtor will continue in business after reorganization, creditors are usually interested in the following:

- A statement of financial position as of the date of proceedings.
- A summary of prior years' operating results.
- Errors or inconsistencies in financial statements previously issued by the debtor.
- An analysis of operating losses prior to the proceeding, essential or potential including cost reduction programs and other economies effected.
- Unusual transactions or possible preferential payments which occurred prior to the proceeding.
- Priority claims (wages and taxes).
- Lines on assets.
- An estimate of the amount available for unsecured creditors in the event of liquidation or forced sale of free assets.
- Before a plan can be evaluated and recommended to creditors, the committee usually requires information which includes:
  - Fast history of debtor and debtor's operations.
  - Operating results since date of proceedings.
  - Financial condition of debtor and prospects of current operations.
  - Payment of dividends since date of proceedings.

The examination may or may not include all standard auditing procedures depending on the scope and time available. In many instances where time is a limiting factor, the accountant may not be in a position to do in-depth or confirm accounts receivable. He may satisfy himself with respect to factored receivables by a confirmation from the factor. Furthermore, vendor balances are compared to claims filed. Allowances incurred in periods prior to and during an arrangement or reorganization proceeding constitute valuable carryforwards available to reduce or eliminate taxable profits, for a period of years, after confirmation. The act provides that no income shall be deemed to have accrued to a debtor as a result of modification or cancellation of any indebtedness. However, certain adjustments may be required to the basis of the debtor's tax return. A creditor may request such reduction or cancellation.

Careful tax planning should be provided by the accountant with respect to the presentation and utilization of less carryforwards and other tax credits. The accountants should also determine that claims for refund of Federal and State taxes are filed. Both the carrybacks of current losses against prior profits and the carryforwards of any taxes that may have been paid erroneously.

Checklist of the accountant's report will usually disclaim an opinion because of certain limitations under the scope of the examination and conditions including time constraints. A typical report includes a balance sheet, a statement of retained earnings, and a statement of income for the year or period since the most recent year-end related financial data. This is usually followed by an auditor's letter pointing out the preliminary nature of the report and certain items included in the financial information relating to possible creditors' committee or other matters requiring further investigation that may be included in this section or in a separate letter to the committee or trustee.
APPENDIX I

Other Sources of Business Information*

Accounting Firms

Accounting Corporation of America

The Accounting Corporation of America publishes semi-annually the *(Mail-Me-Monday) Barometer of Small Business*. Its data are derived as a by-product of the Accounting Corporation's accounting services to clients throughout the country. The *(Mail-Me-Monday) Barometer* classifies its operating ratios for the various industry groups on the basis of gross volume. The classifications vary with the industry group but seldom exceed $300,000. The emphasis is on small business. The ratios can be obtained from the Accounting Corporation's Research Department, 1929 First Avenue, San Diego, California 92101. Following is a list of types of business for which there are ratios:

- Apparel, children's and infants
- Apparel, men's specialty
- Apparel, men's and women's
- Apparel, women's specialty
- Appliance stores
- Auto parts and accessories
- Bakeries
- Beauty shops
- Cocktail lounges
- Confectionary stores
- Contractors—building
- Contractors—specialty
- Dentists
- Doctors of medicine
- Dry cleaning shops
- Drug stores
- Feed and seed stores
- Florists
- Food stores—combination
- Food stores—specialty
- Furniture stores
- Garages
- Gift and novelty stores
- Hardware stores
- Jewelry stores
- Laundromats and hand laundries
- Laundries, plant
- Liquor stores
- Lumber and building material
- Machine shops
- Meat markets
- Menders
- Music stores
- New car dealers
- Nursery and garden supplies
- Paint, glass and wallpaper
- Photographic supply stores
- Plumbing and heating equipment
- Printing shops
- Professional—others
- Repair services
- Restaurants
- Service stations
- Shoe stores
- Sporting goods stores
- Taverns
- TV radio sales and service
- Transportation
- Used car dealers
- Variety stores

National Cash Register Company *

The National Cash Register Company publishes an annual "Expenses in Retailing." This booklet examines the cost of operation in about 40 lines of business. The ratios are obtained from primary sources, most of which are trade associations. For some lines of businesses, the expense percentages are broken down into "controllable expense" and "fixed expense." Following is a list of businesses covered in a recent NCR study:

Apparel stores
Appliance and radio-TV dealers
Automobile dealers
Auto parts dealers
Beauty shops
Foot stores
Florists
Food stores
Furniture stores
Garages
Gilt, novelty and souvenir stores
Hardware stores
Homes
Jewelry stores
Laundries
Liquor stores
Men's merchandise stores
Men's wear stores

Book stores
Building material dealers
Cocktail lounges
Department stores
Drug stores
Music stores
Novelty stores
Nursery and garden supply stores
Photographic studio and supply stores
Professional services
Repair services
Restaurants
Service stations
Shoe stores (family)
Sporting goods stores
Supermarkets
Transportation and service
Variety stores

* Address: NCR Corporation, 1700 S. Patterson Blvd., Dayton, Ohio 45479.

The Bank of America

As a service to business owners and managers and students of small business, as well as to those thinking about starting a small firm, the Bank of America periodically issues detailed studies of problems in opening a business. These studies, published in its Small Business Reporter, include costs-of-doing-business ratios. They can be obtained by writing to The Small Business Reporter, Department S120, P.O. Box 57000, San Francisco, California.

Titles of issues in recent years include:

Apparel Stores
Auto Parts
Banks
Bicycle Stores
Book Stores
Building Maintenance Services
Independent Camera Stores
Proprietary Day Care Centers
Independent Drug Stores
Coin Operated Dry Cleaning Stores
Business Equipment Rental
Convenience Food Stores
The Handicraft Business
Health Food Stores

Home Furnishing Stores
Independent Liquor Stores
Mail Order Enterprises
Mobile Home and Recreation Dealers
Independent Pet Shops
Paint Shops
Small Job Printing Shops
Repair Services
Restaurants and Food Services
Service Stations
Sewing and Needlecraft Shops
Shoe Stores
Independent Sporting Goods
Toy and Hobby Cash Stores

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Trade Associations, National associations which have published ratio studies in the past include the following:

American Association of Advertising Agencies, 200 Park Avenue, New York, New York 10017
American Advertising Federation, 1000 Wilson Boulevard, Arlington, Virginia 22209
American Bankers Association, 200 Madison Avenue, New York, New York 10016
American Society of Association Executives, 1101 16th Street, N.W., Washington, D.C. 20036
American Supply Association, 211 North LaSalle Street, Chicago, Illinois 60601
Aspen Institute for Human Research, 6802, Arlington, Texas 75101
Bally Sports, 100 South Michigan Avenue, Chicago, Illinois 60603
Door and Hardware Institute, 1815 North First Street, Suite 412, Arlington, Virginia 22201
Florida Truss World Association, 20200 Northwestern Highway, Southfield, Michigan 48075
Foodservice Equipment Distributors Association, 352 South Michigan Avenue, Chicago, Illinois 60604
Laundry and Cleaners Allied Trades Association, 845 Valley Road, Upper Montclair, New Jersey 07043
Material Handling Equipment Distributors Association, 104 Wilson Road, Deerfield, Illinois 60015
Mechanical Contractors Association of America, 5550 Wisconsin Avenue, N.W., Suite 750, Washington, D.C. 20015
Monroe Retailers of America, 300 National Press Building, Washington, D.C. 20012
Motor and Equipment Manufacturers' Association, 222 Cedar Lane, Teaneck, New Jersey 07666
National American Wholesale Grocers' Association, Room 1010, 51 Madison Avenue, New York, New York 10010
National Appliance and Radio-TV Dealers Association, 318 West Randolph Street, Chicago, Illinois 60606
National Art Materials Trade Association, 182 A Boulevard, Hasbrouck Heights, New Jersey 07604
National Association of Accountants, 519 Third Avenue, New York, New York 10017
National Association of Electrical Distributors, 600 Madison Avenue, New York, New York 10022
National Association of Food Chains, 1715 Eye Street, N.W., Washington, D.C. 20006
National Association of Furniture Manufacturers, 2401 Connecticut Avenue, Suite 911, Washington, D.C. 20016
National Association of Insurance Agents, Inc., 85 John Street, New York, New York 10038
National Association of Music Merchants, Inc., 65 East Wacker Drive, Chicago, Illinois 60606
National Association of Paints Distributors, 472 Nob Hill Lane, Devon, Pennsylvania 19333
National Association of Retail Grocers of the United States, Suite 620, 2000 Spring Road, Oak Brook, Illinois 60521

National Association of Textile and Apparel Wholesalers, Statler Hilton Hotel, 35th Street and Seventh Avenue, New York, New York 10001
National Association of Tobacco Distributors, 80 East 79th Street, New York, New York 10021
National Automatic Merchandising Association, 7 South Dearborn Street, Chicago, Illinois 60603
National Beer Wholesalers Association of America, 610 North Cleora Avenue, Chicago, Illinois 60656
National Conference of the Unitied States, 50 Washington Street, Chicago, Illinois 60003
National Consumer Finance Association, 1200 16th Street, N.W., Washington, D.C. 20036
National Decorating Products Association, 9334 Dillion Industrial Drive, St. Louis, Missouri 63132
National Electrical Contractors Association, Inc., 2515 Wisconsin Avenue, 15th Floor, Washington, D.C. 20014
National Electrical Manufacturers Association, 155 East 46th Street, New York, New York 10017
National Farm and Power Equipment Dealers Association, 2540 Hampton Avenue, St. Louis, Missouri 63110
National Home Furnishings Association, 405 Merchandise Mart Plaza, Chicago, Illinois 60605
National Kitchen Cabinets Association, 354 East Broadway, Louisville, Kentucky 40202
National Lumber and Building Material Dealers Association, 1090 M Street, N.W., Washington, D.C. 20036
National Machine Tool Builders Association, 7901 Wisconsin Avenue, Chicago, Illinois 60651
National Office Products Association, 1500 Wilson Boulevard, Arlington, Virginia 22209
National Paint and Coatings Association, 500 Rhode Island Avenue, N.W., Washington, D.C. 20005
National Paper Box Association, 351 Kings Highway East, Haddonfield, New Jersey 08033
National Paper Trade Association, Inc., 420 Lexington Avenue, New York, New York 10017
National Parking Association, 1101 17th Street, N.W., Washington, D.C. 20036
National Restaurantanne, 1583 plane, Suite 200, Chicago, Illinois 60610
National Retail Hardware Association, 964 North Michigan Avenue, Chicago, Illinois 60601
National Retail Merchants Association, 103 West Six Street, New York, New York 10016
National Shoe Retailers Association, 300 Madison Avenue, New York, New York 10016
National Soft Drink Association, 1101 16th Street, N.W., Washington, D.C. 20036
National Sporting Goods Association, 717 Michigan Avenue, Chicago, Illinois 60611
National Tire Dealers and Repairers Association, 1343 L Street, N.W., Washington, D.C. 20005
National Wholesale Druggers' Association, 570 White Plains Road, Scarsdale, New York 10583
National Wholesale Hardware Association, 1000 Arch Street, Philadelphia, Pennsylvania 19103
National Wholesale Jewelers Association, 1900 Arch Street, Philadelphia, Pennsylvania 19103
Trade Associations
(continued)

North American Heating and Air Conditioning Wholesalers Association, 1561 West Henderson Road, Columbus, Ohio 43220
North American Wholesale Lumber Association, Inc., Box 713, Clifton, New Jersey 07013
Northeastern Retail Lumbermen Association, 333 East Avenue, Rochester, New York 14604
Optical Wholesalers Association, 6010 Wisconsin Avenue, Washington, D.C. 20015
Painting and Decorating Contractors of America, 7229 Lee Highway, Falls Church, Virginia 22046
Petroleum Equipment Institute, 1579 East 11th Street, Tulsa, Oklahoma 74114
Printing Industries of America, Inc., 1770 North Lynn Street, Arlington, Virginia 22209
Scientific Apparatus Makers Association, 1140 Connecticut Avenue, N.W., Washington, D.C. 20036
Shoe Service Institute of America, 222 West Adams Street, Chicago, Illinois 60606
Society of the Plastics Industry, Inc., The, 355 Lexington Avenue, New York, New York 10017
Super Market Institute, Inc., 360 East Ohio Street, Chicago, Illinois 60611
United Fresh Fruit and Vegetable Association, 1819 18th Street, N.W., Washington, D.C. 20036
Urban Land Institute, 1200 18th Street, N.W., Washington, D.C. 20036
Wire and Cable Wholesalers of America, Inc., 7750 Clayson Road, Suite 201, St. Louis, Missouri 63117

Additional...
Sources of Industry Ratio Data
Among the best known sources of industry ratio data with which to compare your own ratios are the following:

Key Business Ratios. Published annually by Dun and Bradstreet, Inc., 99 Church St., New York, NY 10007.
Cover 125 lines of business activity, including manufacturing, wholesaling, retailing, and construction industries.

Based on data collected from member banks of the association.
Covers approximately 300 lines of business.

Barometer of Small Business. Published semi-annually by the Accounting Corporation of America, 1929 First Ave., San Diego, CA 92101.
The businesses covered here are mostly retail and commercial service groups.
TACTICAL GUIDE TO ARSON-FOR-PROFIT ENFORCEMENT

Target Company, Inc., Balance Sheet

by Loretta Campbell, Special Agent
Criminal Investigative Division
Internal Revenue Service
San Diego, California
TARGET CO., INC., BALANCE SHEET
by Loretta Campbell

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Introduction
Before applying the techniques of financial analysis to the financial statements of a business under investigation, an investigator should determine that the data contained in the statements possess three qualities:

- Reliability
- Consistency
- Comparability

Each of these qualities and its impact on financial analysis will be discussed. The balance sheet for a typical commercial business follows; comments are made about each of the accounts contained in the statement.

First, and most important, the financial statements used in conjunction with financial analysis must be reliable. To be reliable, the financial statements must be based on facts or reasonable belief. These facts will normally be evidenced by various documents called "source documents." Furthermore, in order to be reliable, the financial statements must contain all the pertinent facts, not just those few which would influence a decision.

Financial statements are generally considered reliable if they are based on past transactions or events. Although some estimates are properly included as financial statement data, estimates of appreciation or appraisal values are never considered proper. Accountants use the term "historical cost" to describe this transactional basis of accounting. It means that once an asset has been acquired, the value of that asset may never be increased in the accounting books. Although some critics call historical cost "unrealistic," it forms the basis of nearly all accounting texts.

Some estimates do enter into the accounting process, and those that do usually seek to clarify historical cost values rather than change them. Estimates are used most often in connection with the valuation of inventory, the allowance for uncollectable accounts receivable, and the recognition of the depreciation of long-lived assets.

Financial statements which purport to represent some appraisal value or estimated market value are not considered reliable by accountants. Although some readers may find current market values useful, financial analysis techniques should not be applied to statements based on appraisals. One of the most common reasons given for not using current market
values in financial statements is that appreciation usually benefits the owner only when assets are sold. Even though the appreciation of assets may help the firm in general, it can generally be considered a source of credit, lines of credit are not recognized until they are actually used. And in no case can appreciation help pay the bills until the assets are sold.

While values which are "objective" are one side of the reliability coin, completeness is the other side of that coin. Occasionally, a business may omit or deliberately exclude certain facts from its financial statements. To the extent that facts have been omitted, the financial statements may be misleading. If the omission is "material" or significant, the financial statement as a whole may be useless for financial analysis.

Accountants and auditors are coming under increasing criticism from users of financial statements regarding "disclosure." Disclosure is a note or explanation intended to clarify or expand upon any financial statement item. Disclosure can range from a one word note to pages of discussion and supplemental information. Such explanations make not only the financial statements but the business as a whole more meaningful to readers. In addition to adding increased understanding, disclosure may result in increased reliability of financial statements.

One area of disclosure is becoming of utmost interest to financial statement users because of the increasing number of business failures. The "going concern" principle is used extensively by accountants and financial statement users. A going concern is one which is likely to survive into the near future. A firm is likely to continue to operate if its product(s) can be successfully acquired and marketed and if the firm is in a financial condition to be able to pay its bills as they become due. The going concern principle is of such importance that several major lawsuits are based on the concept. For example, when Penn-Central Railroad failed within months after the auditors of the firm issued their report, its financial statement users named the auditors in a lawsuit for failure to disclose that the railroad could no longer be considered a going concern.

It follows that if the financial statements of a business are incomplete, lacking disclosure, subjective, or in any other way lacking reliability, calculations (such as financial analysis) using the data will be misleading. It does not matter whether the financial statements were accidentally or deliberately misstated because the results would be affected in any case. Therefore, the investigator should have reason to believe the financial statements are reliable before starting any search for evidence that might uncover fraud or related offenses.

The financial statements examined by certified public accountants may help the firm in general, unless there is evidence that the CPA is a conspirator. Financial statements given to businesses such as banks or securities dealers are frequently verified by them. An investigator can view or confirm the existence and cost of some assets using public records. If it becomes necessary to check the underlying documents and accounting books to ascertain reliability, it may require the help of a professional accountant. False or misleading financial statements can lead to erroneous conclusions about the financial condition of a firm. Therefore, if the reliability of the financial statements cannot be determined using any means, financial analysis techniques should not be used.

If an investigator has obtained financial statements for more than one time period and desires to use inter-period financial analysis, the "consistency," as well as the reliability of the financial statements, must be determined. Consistency becomes an important quality when the financial statements for more than one time period are being compared to each other for trends. Consistency refers to the use of the same accounting practices and procedures without change from year to year. A wide choice of practices and procedures are commonly accepted by accountants and businessmen. Each various practice or procedure may yield slightly different financial data.

One of the most basic choices which must be made by a business before preparing financial statements is the basis of accounting. One basis commonly chosen by individuals and small businesses is the cash basis. By selecting the cash basis, transactions are recorded in the accounting records only when cash passes hands. Larger businesses and corporations ordinarily choose a different basis called the accrual basis. Using the accrual basis of accounting, a business recognizes transactions when they are substantially completed but before any cash passes hands. The main difference between the cash basis and the accrual basis is recognition of receivables, liabilities, and depreciation by the latter method. The cash basis does not permit the recording of any receivables or payables. When such receivables and payables appear on the balance sheet, it usually signifies that the accrual basis of accounting has been selected.

Once the election has been made to use either the cash or the accrual basis, no change in basis can be made without complete disclosure of the change. Any change made between years could materially or significantly affect the representations made in the financial statements. Comparison of financial statements before and after the change would be virtually meaningless. To properly change the basis of
accounting, a real effort should be made to recall the financial statements previously issued, and those financial statements should be redone using the new basis between years.

Changing the accounting basis between years would not be an unheard of abuse of financial statements. Electing to use the accrual basis of accounting nearly always gives the impression of increased assets. The accrual basis of accounting recognizes the existence of assets at an earlier point in time than does the cash basis. Even without any real change in the financial condition of the business, a change to the accrual basis can give the appearance of an increase in assets. However, the increase is merely due to a timing difference without any real economic substance. In effect, there is a doubling up in the assets recorded during the year the change is made. Ordinarily, the payables or liabilities of the firm would increase using the accrual basis. They, however, sometimes become overlooked. While the change in basis affects the consistency of the financial statements, the omission of liabilities affects their reliability. Both affect the usefulness of the financial statements for investigative analysis.

Other common elections of accounting practices and procedures affect individual financial statement accounts but do not affect them as completely as a change in basis. Other choices to be made affect the recognition of bad debts, accounting for inventory, and calculating depreciation.

Consistency refers only to the use of the same accounting practices and procedures from year to year. It does not imply that the dollar values attributed to various accounts are unchanging. It does not imply that the trends revealed by the financial statement data are unchanging.

If the financial statements have been examined by a CPA, that CPA's opinion or report makes reference to the consistency of the practices and procedures employed. The bookkeeping staff of the firm under investigation may prove to be valuable witnesses if there is no indication of a conspiracy. A change in business form from a proprietorship to a corporation may trigger a change in accounting practices and procedures. Even a change in account titles appearing on a financial statement may cause a change in accounting methods. If the books and records must be checked for internal consistency, it may be necessary to seek a professional accountant.

The third quality which a financial statement should possess is comparability. (This factor is especially important to inter-firm ratio analysis.) Comparability refers to the similarity of accounting procedures and practices selected by different firms. If different businesses choose similar accounting methods, the financial statements are said to be comparable even if the dollar values are quite different. If widely different procedures and practices are used, the financial statements are probably not comparable, even though the dollar values might be similar. If financial statements which are dissimilar are compared, financial analysis would not yield meaningful results.

Accountants in general are coming under increasing criticism from the users of financial statements regarding the comparability of financial statements. Investors and lenders argue that the wide choice of equally acceptable accounting practices and procedures makes comparability impossible to achieve. They further charge that often disclosure is not sufficient to allow the reader to analyze and evaluate the choices that have been made. Some financial analysts argue that dissimilar financials can be considered comparable even though dissimilar accounting methods have been used if it is assumed that each firm elects methods that will put it in the best light.

The concept of comparability is further complicated by the fact that firms within a particular industry choose accounting methods that are unique to that industry. Furthermore, practices and procedures even vary by geographical location. It becomes particularly important for an investigator to discover industry-wide or geographical quirks, especially if the business under investigation is to be compared to only a few other firms. Trade associations, CPA's, securities analysts, and bankers might provide valuable assistance in this area.

If the financial statements of the business under investigation are being compared to composite ratio results such as those prepared by Dunn and Bradstreet, determining comparability may not pose a serious problem. It is usually safe to presume that the many firms included in the composite have used a variety of accounting methods. It remains, however, for the investigator to determine that the methods used by the firm under investigation do not differ widely from the rest of the industry.

The "Target Co., Inc.," balance sheet is a typical balance sheet for a commercial business. The format presenting the dollar amounts for two or more time periods is called a "comparative" balance sheet. However, before using the balance sheet data, its reliability and consistency must be determined. Each item appearing in the balance sheet has been numbered in the left-hand margin. Each number provides a key to the explanatory note. The notes contain information about the proper or common use of the account, its most common abuses, and some suggestions for further information.
Target Co., Inc.

Balance Sheet
12/31/80 compared to 12/31/79

<table>
<thead>
<tr>
<th>Item</th>
<th>12/31/80</th>
<th>12/31/79</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets:</strong></td>
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<td></td>
</tr>
<tr>
<td><strong>Current Assets:</strong></td>
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<td></td>
</tr>
<tr>
<td>Cash on Hand</td>
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<td>$100</td>
</tr>
<tr>
<td>Cash in Banks</td>
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<td>Marketable Securities</td>
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<tr>
<td>(AB Co., at cost, market value $15,000)</td>
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<tr>
<td>Accounts Receivable - Net</td>
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</tr>
<tr>
<td>Accounts Receivable - Other</td>
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</tr>
<tr>
<td>Inventory</td>
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<tr>
<td>Prepaid Expenses</td>
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<td><strong>Total Current Assets</strong></td>
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<td><strong>Other Assets:</strong></td>
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<tr>
<td>Notes Receivable</td>
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<tr>
<td>Investment, Other Co. (equity basis)</td>
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<td>91,000</td>
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<tr>
<td><strong>Plant and Equipment:</strong></td>
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<td></td>
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<tr>
<td>Land</td>
<td>40,000</td>
<td>10,000</td>
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<tr>
<td>Building - Net</td>
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<td>20,000</td>
</tr>
<tr>
<td>Equipment &amp; Autos - Net</td>
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</tr>
<tr>
<td>Leasehold Improvements</td>
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<td>Suspense</td>
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<td>Deferred Charges</td>
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<tr>
<td>Goodwill</td>
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<tr>
<td><strong>Total Assets</strong></td>
<td>$920,701</td>
<td>$542,601</td>
</tr>
</tbody>
</table>

*The numbers in parentheses below denote each balance sheet entry item. The following pages contain a discussion of questions raised by each numbered entry.*
Questions about Entries, and Investigative Leads:
Target-Co., Inc., Balance Sheet

Item No.

(1) "Cash on Hand" ordinarily denotes petty cash, a small cash fund which is used to pay bills immediately. A paid receipt is properly kept to evidence each expenditure. Being cash, the fund is highly subject to abuse; even though the fund is small in amount, the losses can add up.

An examination of the account in detail is usually complicated by the great volume of activity in the account. The potential benefits of such an examination should be weighed against the time needed to complete the task. Short of a complete examination, several clues may point to misuse of petty cash. They may be single purchases in a large dollar amount, payment of bills which would ordinarily be paid by check, a pattern of missing receipts, frequent reimbursement of petty cash before weekends and holidays, and receipts paid without proper approval.

If misuse of petty cash is detected, identification of a suspect may pose additional problems. It is common for several employees to have authorized access to petty cash. Furthermore, if petty cash is stored in an unlocked place, even unauthorized persons may have access to the cash.

(2) "Cash in Bank" is a perfectly proper account caption for a balance sheet. The caption may summarize one or more bank accounts including checking, payroll, savings, trust fund, etc. The nature of the specific accounts is not ordinarily disclosed in the balance sheet. Some accounts may have restrictions on the use of the money so that the money is not generally available to pay bills. For example, a savings account may be pledged as collateral to secure a loan or a trust fund may have been imposed by a taxing agency. Banks usually maintain files regarding certain restrictions on accounts. If an account is restricted, it may not be a true current asset.

At 12/31/79, the composite balance of all bank accounts is $500.00 according to the accounting books. However, by 12/31/80, the books indicate an overdraft condition of $2,400.00. Brackets appearing around the dollar amount indicate an "abnormal" balance. The normal bank account balance is positive as is the case in 1979; by the end of 1980, the balance has declined to less than zero.

(3) Used properly, " Marketable Securities" represents an investment in stocks and bonds that are traded in an organized market. Such stocks and bonds can be readily converted to cash and are considered to be near-cash. The proper balance sheet value is historical cost or the current market value, whichever is lower. If the security has suffered a permanent decline in market value since its purchase, use of its estimated market value is proper. No gain in market value is ever properly recognized for balance sheet purposes.

This account can be misused in several ways. First, the security may not be traded in an organized market, and if it is not, it may not be classified as a current asset. Checking with a local securities dealer can help to determine its trading status. Second, the value may not be properly shown using the lower of cost-or-market rule. In this case, the security should be shown at its market value of $31,000 rather than its cost of $30,000. Again, the best source of information about market value is a local securities dealer.

(4) The term "Accounts Receivable" ordinarily denotes the amount of money owed to the firm by the customers who have purchased its goods or services. This account properly includes only those amounts owed by customers, not employees, officers, or related businesses. Those receivables owed by customers are frequently called "trade" accounts. Inclusion of debts owed to the firm by its employees, officers, or related businesses is a common abuse. Each of these other debts must be examined.
"Inventory" consists of merchandise acquired and held for the firm for resale. Merchandise taken on consignment, which is not available for sale or which is sold but undelivered, is not properly included in inventory. Inventory is properly valued for balance sheet purposes at the lower of historical cost or market value. If the market value has declined to less than the estimated amount of uncollectables, the note may contain various terms and may be used to cover up an embezzlement or permanent loan. The note is properly valued at the face amount unless it becomes apparent that the customer cannot or will not pay the note, and it is written off as uncollectable. The note may contain various terms and may or may not bear interest.

In the ordinary course of business, "Notes Receivable" indicates that customers who owe past due accounts receivable have issued formal notes to the firm evidencing their obligations. The note is properly valued at the face amount unless it becomes apparent that the customer cannot or will not pay the note, and it is written off as uncollectable. The note may contain various terms and may or may not bear interest.

This account is also used to record a note issued to the firm by an employee, officer, or related business. Each note should be evaluated on its own merits for collectibility. Suspicion should be aroused if a formal note or debt instrument does not exist because the account may be used to cover up an embezzlement or permanent loan. The issuer of the note may not have the means or ability to repay the debt.

"Accounts Receivable - Other" ordinarily indicates that employees, officers, or related businesses owe money to the firm. It is fairly common for a business to advance or loan money outside the normal course of business, and it is not improper per se. However, the money may never be repaid and the account may be used to cover up an embezzlement or a permanent loan. The term "Net" used with accounts receivable indicates that some allowance has been made for uncollectable accounts. The allowance is usually an estimated percentage of accounts which sour based on previous history; that allowance is deducted from the gross amount of accounts receivable, and the remainder becomes the balance sheet value. The reader of the balance sheet is not informed of the gross amount of receivables or the estimated amount of uncollectables.

In comparing the accounts receivable for 1979 and 1980, an obvious change from zero to several thousands of dollars can be observed. There are at least two explanations for this change. First, it is possible that Target Co. did not extend credit to its customers before 1980. In this instance, the investigator may depend on the financial statement. Second, the consistency of the financial statements may be impaired if there has been a change from the cash basis of accounting in 1979 to the accrual basis in 1980. If the second explanation is true, inter-period financial analysis techniques probably should not be used.

"Accounts Receivable - Other" ordinarily indicates that employees, officers, or related businesses owe money to the firm. It is fairly common for a business to advance or loan money outside the normal course of business, and it is not improper per se. However, the money may never be repaid and the account may be used to cover up an embezzlement or a permanent loan. If there is little likelihood of repayment, the account should not be classified as a current asset. The history of each advance or loan should be examined, together with any debt instruments, to determine collectibility. In combination with poor financial health, the accounts may clue a business failure or a creditor rip-off.

Accounting for inventory can be a very complex subject because many estimates and assumptions are employed to clarify its book value. Inventory accounting becomes even more difficult for a manufacturing concern. Accounting for the historical cost of inventory may require the use of a professional accountant.
Notes are also issued during the course of schemes designed to inflate the value of certain assets, particularly real estate. In such a scheme, an asset is sold to a "straw man" or alter ego at an inflated price, and a note is issued for the purchase price. Such a scheme often accompanies an arson fire.

This account caption, "Investment," is commonly encountered in financial statements due to the popularity of corporate mergers and acquisitions. It represents the cost of acquiring a related business and Target Co.'s pro-rata share of its subsequent earnings. The nature of ownership in this stock is different from the ownership of a marketable security. The investment in a related company often results in a competitive advantage for the acquiring firm. Acquiring a critical supplier, for example, assures continuing supplies on necessary materials. Likewise, acquiring a major customer assures a ready market for merchandise produced. Even competing companies are acquired. If the acquiring business were to sell its stock in the related company, it would undoubtedly lose its competitive advantage.

This account can also be used improperly. It may signal a scheme used to inflate the value of certain assets. It may be used as a device to cover up money channeled to a shell corporation for subsequent embezzlement. Sometimes even legitimate businesses have been acquired, their assets looted and left as empty, worthless shells. It may prove necessary to investigate the substance of the related business in order to determine the propriety of the investment. If possible, the acquired business should be observed in operation. The corporate registry and other public records may yield information about the related business.

"Land" includes any real property acquired by a business which is not intended for resale. It has an indefinite life and can be expected to contribute to the business over the entire life of the firm. Its value is not consumed by everyday operations, i.e., it does not depreciate. For all practical purposes, land is valued at its purchase price. It is never proper to recognize any gain in market value prior to its sale.

This account can be abused by valuing the land at some estimated or appraised value instead of historical cost. Complicated schemes have been devised using straw men or shell corporations to seemingly inflate the purchase price of land (and other real estate). Public documents are often helpful in determining the true cost of real estate.

Public documents are also useful for verifying the existence of land and in establishing true ownership. Some schemes are based on nonexistent parcels of real estate; if possible, large parcels should be watched. Occasionally, the land and real estate shown on the balance sheet are not actually owned by the firm. Land should only be shown if the firm holds title to it. Leases or options to purchase do not constitute ownership.

"Buildings" are those improvements and structures of a relatively permanent nature which are owned by a business. The firm must hold title to the buildings but not necessarily to the ground under them. Buildings are properly valued for financial statement purposes at the lower of historical cost or market value. It is not proper to recognize any increase in market value prior to the time of sale.

Buildings are subject to "depreciation," which is an estimated measure of the value that is consumed in day-to-day operations. In other words, depreciation is a measure of the service value contributed to the business by ownership of a long-lived asset. For example, a building may have an estimated service life of fifty years; at five years of age about one-tenth (10 percent) of its service value has been used. If the building cost $100,000, it should be depreciated by $10,000 using the simplest method of depreciation.

Use of the term "Net" on the balance sheet signals that the building is shown at its book value. Book value is the remainder when depreciation has been deducted from historical cost. The financial statement user will not know either the cost of the building or the depreciation that has been recognized. Book value only rarely approximates market value.

As is true with land, the existence of the buildings and improvements should be verified. Proper title to the buildings should also be verified. The cost basis can be tested using public documents, and complicated chains of title can be clarified. Depreciation calculations can become extremely complex, and it may be necessary to enlist the aid of a professional accountant. Sometimes the sale of an asset is improperly recorded in the depreciation account. This results in showing an asset on the books at its full, undepreciated cost when the firm no longer owns it. In this case, an accountant might be needed to sort out the facts.

"Equipment and Autos" is one account caption for which there are various names. It can describe furnishings,
This account caption ("Suspense") is never considered a proper one for balance sheet purposes. It nearly always

(13) "Leasehold Improvements" signifies relatively permanent improvements made to leased real estate by the lessee. Leasehold improvements can include many improvements including remodeling, repainting, or renovating. In general, the improvements will be surrendered with the leased property when the lease terminates; therefore, the improvements are subject to depreciation over the life of the lease. The improvements are generally valued at their historical cost.

The fact that there is an account for leasehold improvements indicates that the business leases at least one piece of property. The lease may involve substantial rent payments over the future with virtually no relief from obligation. Accountants presume that a lease creates a liability; however, few businesses record such an obligation for balance sheet purposes. Target Co. has failed to disclose the terms of the lease as a liability. This omission may constitute a serious defect in the balance sheet. The true owner of the property may be located through public documents; the owner should be contacted for information about the lease.

(14) "Trade Name" is an account title used to denote a valuable intangible asset, one without physical substance. The economic value of the asset stems from the superior earning power of brand name products. Similar assets are copyrights, patents, and trademarks. The right to use the asset may be sold, transferred, or franchised; its life can be unlimited.

The dollar amount is a perfectly acceptable technique for disclosing that the valuable asset exists. Other proper valuations include the purchase price paid to acquire the asset or the cost of developing it. It is not proper to value the asset based on some appraisal or estimate of value.

Advertising expenditures and the costs of research and developing new products are not considered to be assets.

(15) This account caption ("Suspense") is never considered a proper one for balance sheet purposes. It nearly always

(16) "Deferred Charges" is a legitimate balance sheet account used by firms employing the accrual basis of accounting. The uses of the account are complex and technical. Embellishers sometimes hide their crimes in this account. If improper use is a concern, a professional accountant will almost always be needed. In the case of Target Co.'s balance sheet, there were no deferred charges in 1979 but several thousands of dollars were incurred during 1980. While this may be no more than a coincidence, the investigator should consider the possibility that a change in the accounting basis may have occurred which jeopardizes consistency.

(17) Although "Goodwill" is occasionally proper for balance sheet purposes, accountants define it very narrowly. Goodwill is defined as earnings superior to those justified by the assets. Ordinarily, goodwill must be valued using estimates, so it is not often properly shown on the balance sheet. The exception occurs when the business has been purchased as an on-going business at a premium price. Goodwill may be properly included as an asset in this case; its value is the premium portion of the purchase price. In no other circumstances is the recognition of goodwill ever proper.

Even though goodwill is not properly included on the balance sheet, a simple test can be performed to see if it exists. The ratio of net income to total assets can be calculated and compared to that of other businesses in the same industry. If the ratio results are higher, goodwill may exist. The amount of goodwill may simply be that which would bring the ratio into line with similar firms.

The improper recognition of goodwill is a common abuse. It results in the overstatement of total assets and stockholders' equity. Consultation with a professional accountant may be indicated.

(18) "Accounts Payable - Trade" includes those debts incurred to purchase inventory and supplies needed to operate the business. The debts are those created in the normal course of business when a firm buys goods and services on credit. Because they will fall due in less than one year, trade accounts payable are classified as current liabilities. Most trade accounts fall due in seven to thirty days, rarely over sixty days.
One fairly common abuse of this account involves the simple omission of some or all accounts from the balance sheets. This is an especially serious abuse when trade accounts are rapidly increasing. For example, a large increase in trade accounts payable combined with declining inventory levels and/or sales may indicate financial trouble. This situation usually means that creditors are having to wait longer to be paid. An "aging schedule" may provide insight into the build up of trade accounts payable. An aging schedule is a list of all trade creditors and the amounts owed them by due date.

In the case of Target Co., no trade accounts payable were shown for 1979, but more than $95,000 existed by the end of 1980. While it might be a coincidence, the possibility seems remote in light of the changes in assets. It seems more likely that a change has been made from the cash basis of accounting to the accrual basis. Financial analysis should be delayed until it can be proved that the financial statements have been prepared in a consistent manner.

"Payroll Taxes Payable" are those amounts due to federal, state, and local governments including income taxes, social security, disability insurance, and unemployment taxes. The account should include both the amounts withheld from employee paychecks, as well as the employer's contributions. These amounts are ordinarily due in one year, and often less, so they are classified as current liabilities.

The amount owing is frequently small when compared to other liabilities. As the amounts due grow larger, the taxing agencies increase the frequency of payment. Many businesses remit their payroll taxes monthly. A substantial increase in payroll taxes payable may signal trouble ahead. Most businesses are careful to remit taxes promptly because taxing authorities have priority claims to assets and can literally close the doors of a business. Failure to remit taxes on schedule is usually the last resort of a financially troubled business. The investigator should become alert to the possibility of a creditor rip-off, a business failure, or even a arson fire.

The change in the amounts owing between 1979 (zero) and 1980 is another indication of a change in accounting basis.

"Other Taxes" includes sales taxes, property taxes, excise taxes, corporate taxes, etc., owing to taxing agencies. These, like payroll taxes, are considered to be current liabilities. Businesses are generally careful to remit these taxes as well; build up of amounts due may indicate financial trouble.

Wages and Salaries Payable are those wages and salaries which had been earned by employees but were unpaid at the balance sheet date. The amount shown represents the gross amount of the payroll. Employers are usually careful to pay employees on schedule because of the likelihood that the employees would quit otherwise. However, the amount owing may seem fairly large, for in many firms the payroll is only slightly smaller than the cost of merchandise sold.

A large increase in amounts owed to employees without a corresponding increase in the size of the work force may mean that employees are waiting longer to be paid. A missed or delayed payday is a sure sign of financial trouble. Along different lines, an embezzlement suspect may be able to defend his crime if he has not been properly paid.

The change in wages and salaries payable is another indication that the balance sheets have not been prepared consistently.

"Accrued Charges" is an account frequently used for balance sheet purposes. It includes those payables which become payable with the passage of time. Interest is the best known accrued charge. Accrued charges are ordinarily due in one year or less; they are classified as current liabilities. Because of the complex calculations which can sometimes accompany this account, the help of a professional accountant may be needed.

"Current Portion of Long-Term Debt" is a proper account caption; this account is needed to improve disclosure. Accountants recognize that payments may be required on debts that extend longer than the current classification allows. Therefore, those payments required within twelve months are shown as current liabilities, while the remainder of the debt is shown as a long-term liability. Mortgages and bonds payable are common examples of long-term debts which require periodic, current payments

While the use of the account is somewhat technical, it is of importance to financial statement users who need to know what resources will be needed to retire long-term debts. Failure to include such an account may impair the usefulness and reliability of the financial statements.

The change in amounts currently owing is yet another indication that a change in accounting basis has occurred.
"Other Liabilities" may include perfectly proper debts, especially if the amount is large. It is usually quite easy to determine the maturity date of a debt instrument and to properly classify it by due date. Therefore, a demand note might be classified as "other" due to the lack of a definite maturity date, the substance of the demand note should be thoroughly investigated.

It is not uncommon for debts payable to affiliated businesses, officers, or stockholders to be classified as "other" because the likelihood that the debt will ever be repaid. Sometimes, the likelihood of repayment is so slim that it is not a debt at all but more like an equity or ownership investment. Faced with such a situation, the investigator should consult a professional accountant.

If the business has failed prior to investigation, any repayments occurring before failure should be questioned. It is possible that these repayments constitute preference payments or diversions of funds away from true creditors. Suspicion should be especially aroused if these creditors are also stockholders.

The absence of other liabilities in 1979 is further evidence that the balance sheet may not have been prepared using consistent methods.

"Long-Term Liabilities" frequently includes notes, bonds, and mortgages which do not mature or fall due within one year. The liabilities may be secured by specific assets, or the creditors may have to depend on the operations of the business for repayment.

The most frequent abuse of long-term liabilities is their omission altogether from the balance sheet. Such omissions can seriously impair the reliability of the financial statements. Furthermore, it seems likely that the consistency of the balance sheets may have been impaired by a change in accounting basis.

The accounts for outstanding stock and for other kinds of paid-in capital are called contributed or legal capital. They represent the amount paid to the firm by its shareholders to buy its stock. Subsequent trades between stockholders are not shown on the balance sheet because the firm does not receive any money from trades. Contributed or legal capital cannot be withdrawn by or distributed to stockholders except with a court order in extraordinary circumstances.
Development of Circumstantial Evidence

in Arson-for-Profit Cases

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Development of Circumstantial Evidence
In Arson-for-Profit Cases

Introduction

Circumstantial evidence is that from which the mind may logically conclude that the matter at issue does in fact exist. It is not direct evidence, such as eyewitness testimony. It is, rather, evidence from which an inference can be drawn which tends to establish the truth of the proposition to be proven. A prime example of circumstantial evidence is from the classic novel, Robinson Crusoe, in which the hero, while exploring his desert island, discovers a man's footprint in the sand. From that he was able to conclude without doubt that he was not alone on the island even though he had yet to see another human.

Courts have accorded circumstantial evidence the same legal weight and probative value as direct evidence.* It is recognized that a strong, well-connected chain of circumstantial evidence is legally sufficient to sustain a conviction and, when properly marshaled by a prosecutor, can be devastatingly persuasive to a finder of fact whether judge or jury. Thus, a successful prosecution frequently consists of a few key propositions to be proven, surrounded and supported and made probable by establishing and developing the related circumstances or secondary, corroborating facts of the case.

In the investigation and prosecution of offenses growing out of arson-for-profit, circumstantial evidence may frequently be the only evidence available to prove the guilt of the defendant(s). Rarely, if ever, will there exist eyewitness testimony in which the defendant is identified as having been observed setting the fire, paying the torch, or engaging in other conspiratorial activity. The rarity of such direct evidence is, of course, what makes arson-for-profit such a seemingly low risk undertaking for the arson conspirator. As a corollary, the lack of such direct evidence is what makes the investigation and prosecution of arson cases so difficult, time consuming, and unpopular among investigators and prosecutors. Nevertheless, circumstantial evidence establishing guilt is available from many sources, and a knowledgeable investigator, applying reasonable diligence, should be able to develop the circumstantial facts necessary to prove guilt beyond a reasonable doubt.

I. Evidence from the Fire Scene

All evidence gathered at the scene of the fire, whether it be circumstantial evidence or not, should be directed toward establishing certain basic elements:

* See Appendix II to this guide, "Case Citations."
1. That a fire occurred.
2. That the fire was of incendiary origin or, at least, that it was not accidental.
3. That the insured defendant was ultimately responsible for the fire, having been motivated by a desire to defraud his insurance carrier. (Note: The importance and extent of financial motive is specifically addressed in Part I, Chapter 2 of this Manual.)

Proving the occurrence of a fire is a simple matter of record, since in almost all jurisdictions there are fire departments which maintain records of the fires to which they have responded. Proving that the fire was of incendiary origin is a somewhat more difficult problem, and it is in this area that the investigator must frequently obtain circumstantial evidence. In this regard, the investigator should, as soon as possible, question the fire department personnel responding to the fire scene. An expert witness, at a later time, may be able to offer an opinion as to the cause and origin of the fire.

In gathering evidence for the expert's consideration, the investigator should also ask the firemen to describe what if anything, physical evidence may be removed from the scene of a fire during the pendency of the fire department's efforts to extinguish the fire and within a matter of hours thereafter. Once the premises have been vacated by the department, however, re-entry may not normally be made for purposes of removing evidence. Exceptions to this requirement are discussed in footnote 6 to the Supreme Court's Tyler decision.

No matter how obvious the cause or incendiary origin of the fire may be to the investigator, the thorough investigator will consult with a fire cause and origin expert and make available to him all physical evidence, photographs and statements so that he may offer an opinion as to the cause and origin of the fire. The investigator (and, at the time of trial, the prosecutor) should use this opportunity to have the expert interpret, explain, and articulate the inferences which can be drawn from this circumstantial evidence. While the expert may be unable to conclude from the evidence presented to him that the fire was of incendiary origin, he may, nevertheless, be able to eliminate all accidental causes of the fire. It has been held in several jurisdictions that the elimination of all accidental sources for a fire is sufficient to permit the legal inference that the fire was intentionally set. Ordinarily these accidental sources are categorized as defective utilities (such as gas), defective electrical wiring, and smoking by the occupants. Elimination of these sources by the expert is sufficient in many jurisdictions, therefore, to permit the inference that the fire was intentionally set.

Beyond determining whether or not a fire has been set, however, the fire fighters may even be able to provide circumstantial evidence suggesting the intent and motive of the persons who set the fire. For example, in a residential fire, the fire fighters should be asked whether or not the residence only to have them notice that all of the bureau drawers in the bedrooms were open and empty and that all of the clothing had been removed from the closets throughout the house. These discoveries started an investigation which ultimately resulted in the "soldier" being charged with arson and fraud, and these charges were used by investigators in conjunction with other charges to force his cooperation as a prosecution witness in a wide-ranging arson conspiracy case. Similarly, in fires at commercial establishments, the fire fighters should be questioned closely as to the kind and extent of the inventory present on the premises. In one recent federal case, the conspirators followed the classic "bust-out" formula in that prior to torching a tire store, they substituted worn out, nearly worthless used tires for the new
inventory and subsequently submitted full claims for the inventory "loss" pursuant to the owner's contents insurance. The burned debris left by the used tires was indistinguishable from that which would have been left by the new tires. The first fire fighters on the scene, however, noticed that all of the observable inventory appeared to consist of extremely worn and used tires and thus provided a significant lead to uncovering the "bust out."

II. Evidence on Parties-in-Interest

In addition to the fire scene, there are many other sources of circumstantial evidence available to the investigator which may tend to establish a motive to defraud the insurance company on the part of the insured. In establishing motive, the investigator must determine who the parties-in-interest were in respect to the damaged property. In this regard, a party-in-interest may be defined as any person or business organization that has an insured or insurable interest in the property. Such an interest is usually one of the following kinds:

1. Ownership Interest - Clearly the owner of property may obtain fire insurance to cover his potential loss.
2. Mortgage Interest - The purchaser of a property may find it necessary to borrow money from a mortgagee who will then take a secured interest in the premises pending repayment of the loan. Under these circumstances, the purchaser may obtain fire insurance payable to the mortgagee to cover the loan in the event of damage to the premises. In this regard, the investigator should always be alert to the possibility that the mortgage loan is nothing more than a sham transaction used for no other purpose than to create an insurable interest on the part of the mortgagee far in excess of the actual amount of the loan. The ability to convert, for example, a $5,000 mortgage loan into a $50,000 mortgage payment suggests a strong motive for arson. One likely sign of this type of transaction would be a series of purchases and sales of the property, over a relatively short period of time during which the insurable "value" of the property, or at least its price on paper, increased dramatically.
3. Lessor's Interest - A landlord may obtain insurance to protect against rental interruption caused by fire damage to the premises.
4. Occupant's Interest - This may take the form of business interruption insurance (which protects a businessman whose place of business has been destroyed by fire thus cutting off his source of income) or contents insurance (which indemnifies persons whose goods or inventory may be lost by fire).

Frequently, the true owners of a property hide their interest through the use of straw parties who as a matter of record hold title to the property. (See the guide, Economic Intelligence and Arson-for-Profit, Appendix on "Straws," by Mark Zanger, in Part II of this Manual.) The fact that a straw party has been used by the insured to hide his interest can be considered as circumstantial evidence of guilty intent. While there may be a legitimate reason that can be provided as to why a straw party held title, it is not necessary that all innocent interpretations of that fact be eliminated before the circumstantial evidence may be used against a defendant. In this regard, no trial court is allowed broad discretion in using circumstantial evidence bearing on the guilt or innocence of the defendant, and circumstantial evidence tending even remotely to establish the guilt of the defendant may be admitted in evidence whether or not it excludes all reasonable inferences other than guilt.

Accordingly, the investigator should determine which persons, if any, held these types of interests in the damaged property. There are many sources of information which will provide the identities of the parties-in-interest. For example, ownership interest in property may be identified through the records maintained at the tax assessor's office or a title search at the registrar of deeds, while occupants may be identified through commercially prepared city directories or utility company records. (For a step-by-step description of how to use these records, see Harvey Schmidt's Tactical Guide, Record Searches and Document Checks, in Part II of this Manual.) Where the investigator knows the identity of the insurance carrier, he should examine the carrier's claim and other files as well as other record repositories in order to obtain the following documents:

1. A proof of loss statement filed with the insurance company by the insured party.
2. Proof of loss documents supporting the proof of loss statement including financial records, books of account, and invoices for inventory.
3. A listing of all parties with an insurable interest.
4. A history of prior claims (fire, theft, etc.) most likely with regard to present insurer and that property.
5. Recent changes made to increase the policy limits (maximum payout) or to add new coverage(s).
6. Changes in the parties having a beneficial interest in the policy and increases in the amount of their interest.
7. Premium payment record of the insured.
8. Cancellation notice to the insured or a notice that the policy would not be renewed.
9. The report of the local fire department as to the possible cause of the fire.
party-in-interest but also may be used by the investigator to obtain the information he needs by obtaining a routine retail credit report. Credit bureaus maintain information with regard to individuals and businesses. Individual credit may also be determined through state governments that must be considered by the investigator providing the law permits, the banks can provide significant individual financial information may be provided by reviewing the claim file, the investigator may also disclose the officers of that corporation, as well as those holding an ownership interest therein, and the investigator should determine the financial status of all such persons. While significant individual financial information may be obtained by reviewing the claim file, the investigator may also obtain the information he needs by obtaining a routine retail credit report. Credit bureaus maintain information with regard to individuals and businesses. Individual credit may also be determined through VISA, Master Charge, American Express, or smaller credit card agencies. In recent years, a number of financial privacy acts have been passed by the federal and state governments that must be considered by the investigator who wishes to utilize bank and credit records. Nevertheless, providing the law permits, the banks can provide significant information regarding the financial history of an individual or corporation and have available such documentary evidence as loan and credit applications and records of banking activity.

III. Determining Financial Status

Similarly, in establishing the financial status of the property owner, the register of deeds may have on file records of foreclosure proceedings, tax liens, attachments, mechanics liens, and judgments filed on record against the damaged property. Such records, of course, would suggest the need on the part of the insured for funds, as well as a particularized motive on his part to divest himself of the damaged property. In this regard, a particular motive to torch a specific property may be established by consulting the following sources:

1. The Department of Licenses and Inspections or Fire Marshal's Office should be consulted to see if there are building code violations or other types of code violations requiring expensive repairs to the premises or resulting in condemnation of the property.
2. The Zoning Board should be consulted to determine whether or not there has been any recent action by the board that could affect the value of the property such as a change in zoning classification or the denial of a variance for which the insured has applied. This may raise the inference that the insured has been denied a lucrative use of the property which would render the property a liability.
3. The Tax Assessor's Office should be consulted to determine whether or not there has been a recent increase in taxes on the subject property or whether or not the insurer has been denied a variance for which the insured has applied. This would seriously affect either the subject's financial status or the value of the property. For example, if the property destroyed was an apartment building, it would be relevant to know whether there was a class action pending by the tenants to freeze the rent or to compel repairs to the premises. Rather than continue to bear the expense of litigation, the owner may have used arson as a means of "settling" the lawsuit.
4. The clerk's of the local and federal courts should be consulted to determine whether or not the insured or the property in question has been the subject of any recent litigation which would seriously affect either the subject's financial status or the value of the property. For example, if the property destroyed was an apartment building, it would be relevant to know whether or not the property was listed for sale or was available to be rented. If this proves to be the case, the investigator should determine:
   a. The asking price or proposed rent.
   b. How long the property was on the market or available for rent.
   c. The numbers and amounts of offers made on the property.
   d. The realtor's opinion as to why the property failed to sell or be rented. (Barring unique circumstances, the realtor's opinion would ordinarily be inadmissible in court. The factual basis for that opinion, however, would be admissible, and this query may guide the investigator to the facts.)
5. Local realtors should be consulted to determine whether or not the mortgage is delinquent. If so, the number of offers made on the property.
6. The bank or financial institution holding the mortgage on the property should be consulted to determine whether or not the mortgage is delinquent. If so, the amount and duration of the delinquency should be determined, as well as whether or not foreclosure proceedings were underway or about to begin. Also, as a hedge against the possible denial of payment by the
insurance company, the owner may have refinanced the property in order to draw off the maximum amount of cash before using a torch.

As noted earlier, the torching of commercial establishments frequently involves a "bust-out" in which contents or inventory losses are either fabricated or inflated. In this regard, the "bust-out" may utilize any one of the following subterfuges:

1. Submitting claims for inventory that had been removed from the premises prior to the fire.
2. Claiming loss for inventory that was never delivered to the premises.
3. Substitution of cheaper inventory for the insured inventory.
4. Inflating the cost of the inventory.

The investigator should verify the loss by obtaining all invoices, financial records, and books of account in the possession of the insured and compare them to those maintained by the suppliers. This will require a third party interview with each supplier to determine if the records are accurate as to the date, time, place of delivery, date of payment, and the amount of inventory delivered. Any discrepancy would, of course, be relevant to establishing a motive to defraud and, inferentially, a motive to commit arson. It should be kept in mind, however, that the supplier may be part of the arson or subsequent insurance fraud conspiracy. For example, in one recent federal investigation a supplier claimed to have provided a considerable quantity of inventory which allegedly had been lost in the fire on the insured premises. Carefully, the investigation, however, disclosed that the supplier had neither the production capacity nor financial ability to have supplied that amount of inventory, and, as a result, the invoices and the inventory loss claim were exposed as fraudulent.

Frequently, the investigator will be confronted with a claim that the insured's financial records and books of account have been destroyed along with the torched premises. Such a claim should always heighten the suspicions of the investigator as to the good faith of the insured. It is, however, a relatively simple, although somewhat tedious matter, for the investigator to reconstruct the insured's business records by using the following process:

1. Obtain from the insured's bank photocopies of all checks cleared through his account over the most recent two month period and note the payees. Also, the insured's telephone toll records will disclose out of town business associations. If mail fraud is involved (which it is since every arson-insurance fraud involves use of the mails), the U.S. Postal

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Inspection Service may be enlisted to conduct a mail cover of the insured which will yield the names and return addresses of the insured's business contacts. Finally, retail and commercial credit sources should be consulted for identities of known business contacts.

2. All of the individuals and businesses disclosed by step one should be interviewed and their correspondence and financial records reviewed to determine the balance of payments owing to and from the insured, as well as the amount, type, and date of delivery of inventory provided. Provided these records had been kept in the ordinary course of business, they would be admissible in court to establish at least in part the insured's financial condition.

While the above survey procedure is valuable, the investigator may at some point wish to utilize the contents of some individual relevant document. Ordinarily, under the requirements of the so-called "best evidence" rule, only an original of a document can be used to prove its contents. However, where the original has been destroyed or is otherwise unavailable, its contents can be proven by secondary evidence. Thus, copies of the original--or in the absence of copies, the recollection of witnesses--can be offered as secondary evidence of the original's contents. Before the secondary evidence can be admitted, however, it must be demonstrated that the original is truly unavailable. Accordingly, the investigator should try to determine whether the original is available for production and should document his efforts to locate it. Where the insured has alleged that the document has been destroyed, that allegation should be thoroughly documented to lay the foundation for the use of secondary evidence at the time of trial.

IV. Evidence from Insurance Reporting Systems

Once an investigation of an individual fire has been initiated, the investigator should avail himself of the services of the American Insurance Association which maintains the Property Insurance Loss Register (PILR). This is a computerized information retrieval service which lists all property insurance loss claims (except automobile) submitted to those insurance companies belonging to the Association (which write approximately ninety percent of the property and casualty insurance in the United States.) The register contains the following type of information about the fire insurance claims that are reported to it:

1. Name(s) of the insured parties in each fire where a claim was filed.
2. Names of the insurance carriers.

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may "launder" the settlement proceeds by converting them to deposited and withdrew the disposition of the proceeds of the insurance settlement. The Insurance Crime Prevention Institute during the course of his investigation determined that the insured and the suspected torch have concerning the subject of his investigation. However, determined that the insured and the suspected torch each entered their safe deposit boxes. Search warrants were obtained and considerable amounts of cash were recovered, raising the inference that these were the proceeds of the insurance settlement. Any examination of the disposition of the proceeds must take into account the roles of the two types of insurance.

V. Disposition of the Insurance Settlement

As to each and every fire, the investigator should trace the disposition of the proceeds of the insurance settlement. Any evidence that the funds have been "laundered" (e.g., passed in and out of multiple bank accounts, etc.) should be considered by the investigator as further circumstantial evidence of the insured's guilt. In addition to multiple deposits and withdrawals through various accounts, the insured may "launder" the settlement proceeds by converting them to cash. In one recent federal investigation, the insured deposited and withdrew the settlement proceeds through a series of bank accounts and then converted them to cash. It should also be noted that the Insurance Crime Prevention Institute may supply similar information concerning the occurrence of parties-in-interest in connection with fire losses. Accordingly, the careful investigator should consult both the Property Insurance Loss Register and the Insurance Crime Prevention Institute during the course of his investigation to determine what if any information they may have concerning the subject of his investigation.

VI. Preparing a Case for Prosecution

Finally, the investigator should consider the best way to present his findings to the prosecutor for purposes of persuading the prosecutor that criminal charges should be brought. In most arson conspiracy cases, the factual patterns are quite complex and lengthy. Therefore, the investigator should prepare a written report summarizing and organizing his findings. In doing so, he should remember that he has had weeks, months, or even years to absorb step-by-step the information which he wishes to impart to the prosecutor. Consequently, the format of the report is critical. It must present in logical sequence a summary of the relevant facts of the case and explain to the prosecutor how these facts make out a probable arson conspiracy. While the precise format may be subject to modification, it should generally conform to the following outline:

1. Background of the proposed defendants giving their names, addresses, social security numbers, police and FBI record numbers, arrest records, names of known criminal associates, and brief description of any prior similar criminal activity.
2. Background of the case which should take each fire in sequence of time and relate as to each and every fire the following:
   a. Date of fire
   b. Location of property

adjusters settling the claim. One type of adjuster is a salaried employee of an insurance carrier (i.e., a claims adjuster); another type is a so-called "public adjuster," who is an independent operator working as an advocate for the insured, for a percentage fee of the insurance proceeds. In specific instances, both claims and public adjusters have become key figures in arson-for-profit conspiracies. The net result has been an increasing incidence of unfounded or inflated loss claims in return for kickbacks from the settlement proceeds. In other instances, adjusters have served as "pigeons" and "fire brokers" by arranging for arsons in return for the pledge from the insured that he will hire the public adjuster to settle the fire claim. This latter practice is so common that it has been given a name in the insurance industry. It is called "churning," since the public adjuster is "churning" up business on which he can collect his ordinary percentage fee. Consequently, the investigator should pay close attention to the adjuster's financial status and to the reports submitted to the insurance carrier by the public and claims adjuster. Any contacts with the adjuster should be duly noted and documented by the investigator, since it may be possible to catch the adjuster in conflicting statements at a later time.

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   a. Date of fire
   b. Location of property
c. Parties-in-interest

d. Insurance carrier, claims adjuster, and public adjuster

e. Amount and date of settlement

f. Summary of what each witness will say in regard to that particular fire

g. Documentary and physical evidence relevant to that fire

h. All other evidence such as tapes, etc.

3. The statutes violated.

4. Problems of proof such as uncooperative witnesses, low witness credibility, destroyed documents, etc.

If a sufficient number of fires are involved, it may be helpful for the investigator to draft a flow chart setting forth for each fire a summary of the information in "2" above. The chart may be keyed into the report through page references and thus enable the prosecutor to refer quickly to any portion of the case.

While the investigator may be sorely tempted to avoid the tedium of writing such a report, it should be noted that the preparation of the memorandum is in itself a valuable investigative step which forces him to carefully review and organize his case. Frequently, during this process, gaps in the case will become apparent which can be filled by further investigation.

It should always be remembered that before the investigation can reach fruition in court, the prosecutor must be persuaded to file the charges. A prosecutor presented with a concise and comprehensible memorandum may be more inclined to prosecute. Moreover, if the prosecutor cannot be persuaded by the evidence summary, then the case itself may have little or no chance of success in the courtroom. Accordingly, the effort spent in writing the summary will enable the investigator to focus on and correct deficiencies in the case and assist the prosecutor in making an informed decision as to whether any further time should be expended on the case.

In order to familiarize the reader with the development and presentation of circumstantial evidence in an arson case, an example of a representative arson fraud investigation is included as an appendix to this paper. While many schemes which the investigator may encounter are more complex, and involve more defendants, than State of Minnesota v. Markwood, the basic elements in this investigation are the foundation upon which any solid circumstantial case should be based. (See the Criminal Complaint and Commentary, State of Minnesota v. Markwood (1977), Appendix I to this guide.)
The Complainant states that the following acts establish PROBABLE CAUSE:

1. Your affiant, Michael Markwood, is an investigator for the Anoka County Major Crime Investigation Unit.

2. Your affiant has reviewed the report of Fridley Police Officer Harvey Pfuhl and learned that at approximately 4:06 a.m. on December 31, 1976, Officer Pfuhl responded to a report of a fire at the Michael Markwood residence, 5432 Altura Road, Fridley, Anoka County. He found the home on fire. Pfuhl attempted to enter the house to remove any persons therein, but found the doors and windows locked. He broke into both the front door and the back door, but was unable to enter the house because of the large quantity of smoke.

3. Your affiant has spoken with and reviewed reports of Fridley Assistant Fire Chief Robert Aldrich, and learned substantially the following:

   Aldrich has been employed by the Fridley Fire Department since 1953, and has served as fire investigator for some 15 years. He is a member of the International Association of Arson Investigators. Aldrich inspected the Michael Markwood residence, 5432 Altura Road, Fridley, after the fire of December 31, 1976, and was requested to look into the case. He noted that the building was only partially destroyed. An area near the water heater in the basement was extensively damaged, as was the bathroom area on the first floor immediately above the water heater area. The remainder of the home was left slightly damaged. When Aldrich approached the water heater area in the basement, he noticed a dusty smell of gasoline. He also observed a burnt pattern on the floor of the space near the water heater. He further observed that the water heater itself was not damaged. He concluded that the water heater was not the source of the fire.

   Aldrich further noted that there was a burn pattern on the wall adjacent to the water heater. This pattern was roughly the shape of a "Y" with the small part of the "Y" near the floor and hence near the base of gasoline-soaked rug. Aldrich knew from his experience that fires are narrow near the origin source, spreading out as the flames grow higher.

   Based upon the observations, Aldrich concluded that the origin of the fire at 5432 Altura Road was the box of gasoline-soaked fabric. He further concluded that the fire could have been set by a fuse trail, which was destroyed, or by the placement of the gasoline-soaked material near the gas water heater where natural forces would have caused the gasoline vapors and thus the gasoline in the material to ignite in time.

   Aldrich noted during his subsequent inspection of the house that there were few clothes and little food in the house. He also noticed a past due bill from Minneapolis which indicated that gas service could be shut off as early as December 28, 1976.

   Aldrich also spoke with Michael Markwood by telephone, and during the course of this conversation Markwood stated that he had been in his home at approximately 2:00 a.m. on December 31, 1976, and that when he left the house it was locked. He indicated that the family was away on a visit that night.

   4. Your affiant has reviewed the records of the Anoka County Register of Deeds and learned that the property at 5432 Altura Road, Fridley, is subject to a mortgage held by Kossemy Realty.

   5. Your affiant has examined copies of insurance applications, policies, and claims and learned substantially the following:

   Michael Markwood insured the property at 5432 Altura Road, Fridley, by a Homeowner's policy issued by the Allstate Insurance Company. He applied for this policy in August, 1976. He claimed this as his residence, and this policy was in effect on December 31, 1976. In his application he stated that he was the owner of the property, and that the property was subject to a mortgage in favor of 2 & J Properties, Inc. Markwood did not mention the mortgage to Kossemy Realty. This policy was issued in face amounts of $40,000 dwelling coverage and $10,000 personal property coverage.

   In March, 1977, Michael Markwood filed a proof of loss with Allstate Insurance Company claiming $25,985.44 in damages from the fire of December 31, 1976.

   

   STATE OF MINNESOTA
   COUNTY OF ANoka
   Plaintiff,

   vs.

   MICHAEL MARKWOOD
   Defendant.

   COMPLAINT

   The Complainant being duly sworn, makes complaint in the above-named Court and states that there is probable cause to believe that the above-named Defendant committed the offense described below. The Complainant states that the following facts establish PROBABLE CAUSE:

   1. Your affiant, William Johnson, is an investigator for the Anoka County Major Crime Investigation Unit.

   2. Your affiant has reviewed the report of Fridley Police Officer Harvey Pfuhl and learned that at approximately 4:06 a.m. on December 31, 1976, Officer Pfuhl responded to a report of a fire at the Michael Markwood residence, 5432 Altura Road, Fridley, Anoka County. He found the home on fire. Pfuhl attempted to enter the house to remove any persons therein, but found the doors and windows locked. He broke into both the front door and the back door, but was unable to enter the house because of the large quantity of smoke.

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   Aldrich further noted that there was a burn pattern on the wall adjacent to the water heater. This pattern was roughly the shape of a "Y" with the small part of the "Y" near the floor and hence near the base of gasoline-soaked rug. Aldrich knew from his experience that fires are narrow near the origin source, spreading out as the flames grow higher.

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   In March, 1977, Michael Markwood filed a proof of loss with Allstate Insurance Company claiming $25,985.44 in damages from the fire of December 31, 1976.
In Re: Michael Markwood, Summary of Investigative Reports

For a period of several months ending December 31, 1976, Michael Markwood resided with his wife and her four children at 5432 Altura Road, Fridley, Anoka County. At this location is a single family residence which was on December 31, 1976, being used as a dwelling by Markwood and his wife and her four children.

On December 31, 1976, the property at 5432 Altura Road, Fridley, (hereinafter referred to as the "building") was insured under a homeowner's policy issued by the Allstate Insurance Company. The insurance covered the dwelling up to $40,000; unscheduled personal property contents up to $20,000; and for other additional incidental losses. Markwood had applied for this policy on August 21, 1976, and was issued the policy through the Allstate Insurance agency located at the Brookdale Shopping Center, Brooklyn Center, Minnesota.

A fire was discovered at the building at approximately 4:00 a.m. on December 31, 1976, when smoke was noticed coming from the building. The Fridley Fire Department responded and extinguished the fire.

The fire fighting personnel detected a strong odor of gasoline while extinguishing the fire. The gasoline odor was traced to gasoline-soaked rags next to the natural gas water heater. Deputy Fire Chief Robert Aldrich found the source of the fire to be a pilot light water heater in a small storage room in the basement of the building. The fire started when vapors from the gasoline-soaked rags reached the natural gas-fired water heater and were ignited. This is a known method of starting fires.

By his own admissions, Markwood placed himself in the building two hours before the fire was discovered. Markwood and his wife and the four children were not in the building at the time of the fire, as the defendant had left with his family on a trip at approximately 2:00 a.m.

Commentary: State vs. Markwood, Organizing and Presenting Circumstantial Evidence

The following is intended to suggest additional lines of inquiry and points of evidence that should be used to supplement the complaint in State vs. Markwood and to further suggest various techniques for presenting the case at trial.

1. The Fire Scene
   a. Based on the policeman's testimony that the doors and windows were locked, the prosecutor may argue that the house was secured to delay the firefighters from reaching and extinguishing the fire.
   b. All personnel responding to the scene should be interviewed concerning their observations re: - Course, spread, and color of the fire and smoke. - Whether any contents of house (clothing, furniture, plumbing fixtures, etc.) were missing (this to corroborate and expand upon the observations of the Assistant Fire Chief.)
   c. The neighbors should be interviewed to determine whether they observed anyone removing contents from the house or any unusual activity prior to the fire.
   d. Was the fire featured on local television news? If so, the video tapes may be used by the prosecutor to gain the jury's undivided attention and dramatize the nature of the crime.
   e. As soon as possible after the fire has been brought under control, investigators should extensively photograph and videotape the scene, as well as remove the physical evidence from the scene. These tapes and photographs should be keyed into an enlarged diagram of the scene showing the precise location from which each piece of evidence has been removed. The diagram should also note the distances from Markwood's house to other houses or structures, as well as the location of the gas main on or near the premises (from this the prosecutor can let the jury infer Markwood's wanton disregard for the lives and property of others.)
   f. A videotape demonstration should be prepared showing how gasoline fumes can be ignited over long distances by the pilot light or heating element of a hot water heater, as well as the "V" pattern which will result from the burning of rags.

2. Markwood's Financial Condition
   a. A current credit report on Markwood should be obtained, and his friends, relatives, and business associates should be interviewed to determine his solvency and the degree of his need for cash.
   b. Real estate records should be checked to determine whether back taxes are owed on the property, zoning violations exist, or zoning or other governmental action has been taken which would affect the value of the property.
3. Markwood's Story

a. Markwood should be questioned to determine when he made arrangements to have his family out of the house and his answers should be checked against third-party interviews.
b. Markwood should be questioned as to his activities in the house on the date of the fire and his answers should be checked against the contents of the house (e.g., if he said he was painting the house, look for painting paraphernalia, etc.).
c. Markwood should be asked to identify his signature on all relevant documents and to answer questions concerning his need for cash, the representations in his proof-of-loss statement, etc.

4. Miscellaneous Issues

a. Who was the claims adjuster and what was his relationship, if any, to Markwood (i.e., strictly business, friend, family friend, etc.)?
b. Is Markwood fire prone? Check his possible prior fire loss history with the Property Insurance Loss Register (PILR) of the American Insurance Association.
APPENDIX II
DIGEST OF CASE CITATIONS ON ARSON, CIRCUMSTANTIAL EVIDENCE, AND ARSON-INSURANCE FRAUD PROSECUTIONS

Prepared by
David Lewis
Research Assistant
Battelle Human Affairs Research Centers
Seattle, Washington

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I. USE OF CIRCUMSTANTIAL EVIDENCE

DIGEST OF CASE CITATIONS

I. USE OF CIRCUMSTANTIAL EVIDENCE

II. WEIGHT AND SUFFICIENCY OF CIRCUMSTANTIAL EVIDENCE


New York

People v. Greenwood, 20 A.D. 2d 272, 273; People v. Constantine, 35 A.D. 2d 613, citing People v. Brasch, 193 N.Y. 461; People v. Conroy, 287 N.Y. 201; People v. Ulisano, 18 A.D. 2d 432; People v. Reade, supra, at p. 46; People v. Wulford, 19 A.D. 2d 731; People v. Leyra, 1 N.Y. 2d 198 (1956); People v. Harris, 306 N.Y. 345 (1954); People v. Wagner, 71 App. Div. 399, at 402; People v. Jaehe, 103 N.Y. 182; People v. Jennings, 40 A.D. 2d 359, aff'd 33 N.Y. 2d 880; People v. Lewis, 1 N.Y. 2d 137; People v. Rannier, 116 N.W. 999; Robinson v. State, 108 P. 2d 196, 71 Okl. Cr. 75; People v. Rooks, 40 Misc. 2d 359 at 375.

Massachusetts


III. MOTIVE


IV. CORPUS DELICTI

IV. CORPUS DELICTI (cont'd)


V. INTENT

State v. White, 291 N.C. 118, 126, 229 S.E.2d 152, 157 (1976); id. at 126, 229 S.E.2d at 157; State v. Kinlaw, 150 N.J. Super. 70, 374 A. 2d 1233 (1977); People v. Roderman, 34 Misc. 2d 447, 229 N.Y.S. 209 (Sup. Ct. 1962); People v. Mooney, 127 Cal. 339, 59 P. 761, 762 (1899); N.Y. PENAL LAW Sec. 150.10 (McKinney 1978); People v. McCrawford, 47 A.D. 2d 310, 366 N.Y.S.2d 242 (1st Dep't 1975); Morvillo v. State, 144 Tenn. 278, 230 S.W. 966, 967 (1921) (citing McDonald v. People, 47 Ill. 533 (1868)); Latham v. State, 88 Fla. 310, 102 So. 551 (1924); People v. LaSokowitz, 257 A.D. 518, 13 N.Y.S.2d 663 (3d Dep't 1939); Both v. State, 88 Ohio App. 420, 186 N.E. 7 (1933); Commonwealth v. Alba, 171 N.E. 458, 271 Mass. 333 (1930).
VII. DEFENDANT'S PRECARIOUS FINANCIAL POSITION


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VIII. PROOF OF CORPUS DELICTI (cont'd)

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Also:

Gedicks v. State, 214 N.W.2d. 569.

IX. EXPERTS


X. FLAMMABLES


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People v. Popoff, 289 N.Y. 344; People v. Moore, 18 A.D.2d 417; People v. Lewis, 275 N.Y. 33; People v. Murray, 259 A.D. 416.

Massachusetts


XI. REMOVAL OF GOODS FROM HOUSE

People v. Martin, 59 Ill. App. 3d 785, 376 N.E.2d 65 (1978); Gipson v. State, 162 Miss. 480, 139 So. 868 (1932); State v. Berkowitz, 325 Mo. 519, 29 S.W.2d 150 (1930); Commonwealth v. Nasuti, 180 Pa. Super. 279, 119 A.2d 642 (1956); Watt v. State, 193 Tenn. 257, 246 S.W.2d 4 (152); Gamble v. State, 159 Tenn. 446, 19 S.W.2d 279 (1929);
XI REMOVAL OF GOODS FROM HOUSE (cont'd)


XII. OTHERS: MISCELLANEOUS


APPENDIX III

Suggested Readings


"``Introduction of Circumstantial Evidence Based on an Inference on an Inference Allowed'' 2 William and Mary Law Review 506 (1960).


TACTICAL GUIDE TO ARSON-FOR-PROFIT ENFORCEMENT

Economic Intelligence and Arson-for-Profit: The Example of Real Estate

by

Mark Zanger
Boston, Massachusetts
Economic Intelligence and Arson-for-Profit: The Example of Real Estate
by Mark Zanger

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Economic Intelligence and Arson-for-Profit: The Example of Real Estate
by Mark Zanger

Introduction
Although a great deal is being said about economic intelligence, very little has been written about it. For a number of reasons, economic intelligence has enormous potential as an investigative tool:

- Many investigations have been helped along by insights into business practices, especially into rental housing.
- Most firemen are not involved actively in the real estate business; neither are police, unless they know someone who is a real estate broker or contractor. Prosecutors, as lawyers, are somewhat more knowledgeable, but seldom participate in the investigative phase of arson cases.
- Arson for profit has received increasing attention, both from an outraged public and from curious investigators who would like to know more about arson's economic motives.
- Everyone would like to be able to make predictions about real estate values.

Despite the above, economic intelligence is usually not a routine feature of arson or related fraud investigation. Most criminal cases result from witnesses and good scene examinations. Why are efforts to develop economic intelligence so rare? A number of reasons for this have been suggested:

- "No time, manpower, money, or training."
- "Our big problem is really kids, revenge fires, space heaters, abandoned buildings, illegal wood stoves, etc."
- "We can't keep or publish files on property owners and landlords. It is not fair. Innocent people would not be able to get insurance."
- "We're going to do all that stuff with our new computer, as soon as we get the bugs out of it."
None of these is an irresponsible excuse. They are real problems and they need to be addressed before starting an economic intelligence effort.

I. What Economic Intelligence Can and Cannot Do

Economic intelligence, approached systematically, can provide something along the lines of the following breakdown of information:

- 50 percent -- background for individual fire investigations.
- 40 percent -- help in planning investigations.
- 10 percent -- hints for future investigative resource allocation, in terms of budget decisions, and ways to pick targets for post-fire investigations at different levels of effort.

These numbers provide crude estimates of the output uses to which economic intelligence systems can be put. The percentages may vary. For instance, in certain areas economic intelligence may be used 80 percent of the time as part of the go-ahead decision on a task force investigation of particular owners, but only 20 percent of the time for each individual building fire investigation.

Economic intelligence in the narrow, tactical sense (i.e., information about financial background that may have provided the motive for arson) can never be more than half of the picture. Some people will never set a fire (or have it set) regardless of the economic pressures they face. Other people seem driven to torch buildings that could be very profitable for the average operator. This human factor, or moral hazard, is more familiar to most arson investigators than are the economic factors. It has been said that “bad” people set fires, and the worst people set fires under all sorts of economic conditions. They burn new, modern apartment buildings in good neighborhoods; they even burn their own houses.

But such desperate cases are rare. Most “torches” burn buildings for insurance money because they are not making money any other way. In addition, a significant number of arsons are done for insurance motives that have to do with escaping a foreseeable loss, or recapturing a lost investment. In these cases, the insurance claims may not be inflated fraudulently, but the building is overinsured in comparison to the declining market value of the property.

Community activists and civic group leaders are often more familiar with economic pressures than moral hazards. They notice that deteriorating buildings are burned, and the buildings in the worst condition seem to be burned under all sorts of ownerships. When a whole neighborhood starts to experience fires and the burned buildings are not repaired, civic leaders often pinpoint the problem as economic change, where firefighters see “bad” people moving in. The point is that both trends may be going on at the same time: “bad” owners destroy neighborhoods and “bad” (declining) neighborhoods attract arsonists.

So economic intelligence and moral hazard intelligence should be used together for maximum impact. (See Table 1, below.)

II. Looking at the Problems ... and Some Solutions

A. “No Time, Money, People, Training.”

These complaints have become common issues in recent years, with the growing concern of most cities and towns to demonstrate fiscal restraint. There are a number of ways to deal with this problem of limited resources. Local officials can be persuaded to reduce the enormous financial losses from arson, and dramatic stories can be provided of how that can be done. For example, officials could be reminded that an occupied building pays taxes, and a burnt-out shell is often razed (or boarded up) at taxpayers' expense, where it usually remains unproductive of tax revenue. Some officials are moved by statistics on the real injuries and deaths to residents and firefighters as a result of arson-for-profit.

A different approach to dealing with insufficient resources is to make it clear that many of the things proposed do not cost much money, if they are done routinely. Fire incident data is collected and gets used once in an investigation of an individual fire, once more when fire patterns are examined, and perhaps again at the end of the year for budget allocation studies. The user only pays to collect it once, and much of the collection work can be done by civilian researchers like interns, CETA workers, elderly part-time workers, or perhaps even volunteers. Many public records could be reported to the collectors over the phone by existing city personnel, given the approval of local government leaders.

The emphasis should be on what economic intelligence could do if the choice to undertake such a program were made.
### TABLE 1

<table>
<thead>
<tr>
<th>Economic Pressure</th>
<th>Moral Hazards</th>
<th>Good Person</th>
<th>Bad Person</th>
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<tbody>
<tr>
<td>Profitable building</td>
<td>(1) No arsons</td>
<td>Moderate number of arsons</td>
<td></td>
</tr>
<tr>
<td>Insurance more profitable than operation of building</td>
<td>(3) Very few arsons</td>
<td>(4) Most arsons</td>
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</table>

*Adapted from a chart used by the author in explaining arson prediction systems.

---

B. "The Big Problem Is Non-Economic Arson."

To begin with, it is questionable whether those who say which fires are (or are not) arson-for-profit, or even arson at all, really know. With 1 to 5 percent of arsons being prosecuted, we really do not know what the proportion of each motive is in considering the entire arson problem. Using economic research approaches suggested in this paper, a person could make an educated guess about the motives in the 20 to 50 percent of the fires in American cities that are attributed to arson. Because such estimates cannot be done from crime scene examinations alone, techniques of economic research should be coupled with the fire cause and origin findings, in order to approach an accurate estimate of the number of arson-for-profit fires.

C. Files and the Innocent.

This is a serious problem, but not as serious as arson. A lot of the fairness issues can be resolved by doing the same level of investigation, as a matter of routine, on all fires of a given size and determination of cause category. In that way, investigation is being done equally to every owner who experiences a fire. If information is published, or fire control policy research is made available to the media, it should involve the same level of information on all fires. A little common sense, some solid legal advice, and a lot of concern over evenhandedness will accomplish the objective of equity here.

Political problems are inevitable because most arsons are investigated at a local level, and some of the most active businessmen in local government are rental housing owners. That means political donors, subjects of code inspection, plaintiffs and defendants in local civil courts, seekers of zoning variances, are all mostly the same people: landlords.

D. "Computer Bugs Are Holding Up Our Arson Program."

One piece of advice is not to wait for access to or to rely on computers, but to design a manual economic arson intelligence system. Most things a computer can do, human beings with a simple index card file can do just as well; at least for the time being. If a good card file is being used, keep using it and transfer the information to a computer when the latter is operating smoothly.

III. Economic Intelligence is Complicated

Because economic intelligence is a complicated function does not mean that it is impossible to undertake; it means that
mined fires

A sample of all buildings in the same neighborhoods (weighted out by locations where the fires occurred) may show that such fires were behind in their real estate tax payments. A sample of all buildings in the same neighborhoods (weighted out by locations where the fires occurred) may show that these buildings were in arrears only three times in ten, or 30 percent of the time.

Obviously, this city has a serious tax collection problem, and obviously the most fire-prone neighborhoods are under economic distress. What could the relationship be between the two factors?

- Owners are burning the buildings to escape financial problems?
- Owners are forced to rent these "bad" buildings to risky tenants who set the fires?
- Excessive taxes are driving the weaker landlords to arson?
- Tax arrears and arson are both signs of serious problems in the area, with the worse-off buildings showing the most of both tax arrearage and arson?

The city involved in the example above may attempt to strengthen the legal force of its tax liens so as to confiscate fire insurance payments on buildings with back taxes. The idea here would be to "take the profit out of arson."

Another source of complication in economic intelligence is that the local housing market, which is a major business subject to arson, is very compartmentalized. Supply and demand vary through a series of submarkets: low-income rental, student groups, working couples, luxury, elderly, middle-class family—all are different markets with their own trends, and many of them are volatile. Housing of one kind is not quickly converted into another kind, so a property investor can get stuck with the wrong buildings while a competitor cannot expand quickly enough. The really lucrative, "fast" money is made by anticipating these market changes and being the first to convert or at least one of the early ones to do so. Really large business failures happen when a speculator guesses wrong, or gets stuck in a new market with little or no growth potential.

Furthermore, the real estate business can get either better or worse in a given neighborhood, independent of national or even regional economic trends. City planners, urban renewal authorities, large owner-developers, large employers, and local

banks can all have a voice in the future composition of an area, but sometimes they guess wrong also. A whole new vocabulary has grown up to describe changes in the housing markets: blockbusting, gentrification, and displacement are a few of these new terms.

Table 2 is an attempt to show some of the forces acting on a single small street in Boston, the now well-known Symphony Road. In October 1977, six owners of property on this street were among 33 individuals indicted on state charges in a large arson-fraud and corruption conspiracy.

IV. Proposals for Economic Intelligence Systems

Table 3 shows, in simplified graphic form, four proposed levels of economic intelligence systems. Levels 1 and 2 are practical, manually operated investigative routines. Level 3 involves a background "control" study that might be useful in training or in making periodic adjustments. Level 4 suggests a method for setting up an arson early warning system a year or two down the line, using the products of routine investigative research. Detailed discussions of each level follow, but all have the same logical basis; that arson and related insurance fraud can be investigated systematically, like other crimes.

Usually, when dealing with organized kinds of crimes, where levels of planning and organization are evident, law enforcement personnel draw up a "known violators" list. This is usually a group of habitual, career criminals known to specialize in a particular type of crime. It is assumed that the major violators are responsible for a large part of the crimes committed. For example, a list of known and reputed "hit-men" would be valuable if it included people doing even a fraction of the known murders with underworld connections. A list of fences might be valuable if they were doing only 15 percent of all the criminal rentals in the area, because the total volume of traffic in stolen goods is so tremendous.

Typically, such lists are assembled from prosecutions, surveillances (of principals and associates), "street" information, and open investigations. Usually, they do not contain the names of new offenders, and are often inaccurate as to the relationships between and among offenders and their associates. Most suffer from the "chart" mentality, where organized criminals are seen to work in a stable and fixed hierarchy, which only changes through death and perhaps imprisonment. In reality, relationships of power and influence in much of the underworld change from one particular scheme and conspiracy to the next. So a list of principal racketeers and their associates is at least a starting point in the development of an anti-crime strategy.
A arson-for-profit is a different type of crime problem. Every arson is recorded, at least as a fire in a specific building on a specific date. Every building has a legal owner of record at every point in time. Thus it is possible to make a potential major violator list of fire-prone owners which includes every possible arson in the geographic area under consideration.

<table>
<thead>
<tr>
<th>Period</th>
<th>Economic Factors</th>
<th>Moral Factors</th>
<th>Fire Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>1910-30</td>
<td>Working-class tenements built for families</td>
<td>Unknown</td>
<td>Unknown</td>
</tr>
<tr>
<td>1930-50</td>
<td>National depression, war changeover from gas to electric illumination</td>
<td>Unknown</td>
<td>About twelve small fires</td>
</tr>
<tr>
<td>1950-60</td>
<td>Movement to suburbs, failure of local employer</td>
<td>Neglect by Boston’s largest landlord</td>
<td>Same general fire rate--first fatal 1959</td>
</tr>
<tr>
<td>1960-70</td>
<td>Post-war babies reach college age, fill Boston</td>
<td>Sale of buildings to younger managers</td>
<td>Same rate few more big fires</td>
</tr>
<tr>
<td>1970-73</td>
<td>Student demand peaks late due to local music school. Heavily leveraged speculation in subdividing for students. Rent control. Increasing pressure for repairs from city inspections</td>
<td>Buildings now in hands of speculators-investors. Rise of professional managers</td>
<td>As above</td>
</tr>
<tr>
<td>1974</td>
<td>Oil crisis inflation, drop in student population leads to vacancy problems</td>
<td>Owners meet arsonists</td>
<td>First wave of large fires</td>
</tr>
<tr>
<td>1975-76</td>
<td>Student population falls. Area gets bad reputation</td>
<td>Some buildings change to street criminal tenancy</td>
<td>Second fire wave in 76-77 broader area</td>
</tr>
<tr>
<td>1977-78</td>
<td>Gentrification, condos, citywide arson all reduce vacancy rates. New law enforcement. Rental housing shortage</td>
<td>Community groups, law enforcement anti-arson effort</td>
<td>Fires back to pre-73 levels</td>
</tr>
</tbody>
</table>

*Economic influences and fire problems in the high-numbered half of Symphony Road, Boston, 1910-1978. Sources: Building Department, Registry of Deeds, Fire Department, City of Boston*
## TABLE 3
### LEVELS OF ARSON INTELLIGENCE

<table>
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<th>Level of Routine Investigation</th>
<th>Per-Fire Time</th>
<th>Estimated Cost</th>
<th>Collated Products</th>
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</thead>
<tbody>
<tr>
<td>I. Ten-year financial and ownership history (Registry of Deeds), code history--fire building only.</td>
<td>One person/day</td>
<td>$60/fire</td>
<td>Fire-prone owner list (after a year), various economic studies of risk, fire-prone mortgagee lists</td>
</tr>
<tr>
<td>II. Ten-year listing of owner's other properties (Registry of Deeds) and previous fires.</td>
<td>One person/day</td>
<td>$60/fire</td>
<td>Fire-prone owner list (immediate), economic and moral hazard studies of risks, fire-prone associates lists</td>
</tr>
<tr>
<td>III. Control research into owners without recent fires.</td>
<td>One person/day</td>
<td>Depends³</td>
<td>Studies of what economic situations are fire-prone; resource allocation, inspection program, priorities, legislation, prediction systems</td>
</tr>
<tr>
<td>IV. Early warning system</td>
<td>One and one-half person/day</td>
<td>$60,000 start-up, 4 Plus $100 per new building</td>
<td>Neighborhood development policy, more precise versions of products of III, above.</td>
</tr>
</tbody>
</table>

*Notes appear on following page
Footnotes to Table 3

1 Will vary with qualifications of person doing the job. Interagency cooperation could reduce the time by making this research into a series of phone calls, with the records searches done by personnel at the Registry of Deeds, inspection departments, etc. Another outcome of this kind of organizational approach might be to increase the time of completing each investigation, but reduce the cost, or spread it through various budgets in a task-force approach.

2 Based on using a civilian investigator paid $15,000 per year to work 250 days. In my experience, such people work at about the speed estimated in the previous column. Thus about the minimum program for one full-time person would be the first two routines performed on about 100 to 150 building fires per year. This job also might be adapted to permanent part-time work for a housewife or retired person, in jurisdictions with less fires.

3 Depends, among other things, on how far you want to go. This level of research is almost universally ignored because it does not appear productive in solving arson cases. Arguments for this research appear in the text of the paper. A minimum program for training evaluators might be ten buildings at $600 to $1,200. It is also possible to derive a useful sense of normal figures from city planning agencies in larger cities. For example, they know how many buildings there are, and you know how many fires there are each year. From this can be derived a crude average number of fires per building per year, from which you can evaluate (crudely) fire-prone owners. Neighborhood breakdowns are that much better.

4 Based on $24,000 to research 100 buildings and paired controls (200 in all), $26,000 for computer analysis and boondoggle factors. I would add that two attempts in progress to set up early warning systems average over $100,000 in start-up. On the other hand, half the work consists of the same kinds of research which I propose doing routinely as Levels I, II, and III. So this can be considered as an option to be added on later to a basic program.
The problem with such a list is that it also includes many people who are probably innocent of any wrongdoing. Common sense would suggest that the most fire-prone landlords, the ones with as many fires as buildings in a given time span, are not innocent. But even if they were, this list is a legitimate one, so long as it is described accurately. For example, the following description might be used in an internal memorandum by personnel who seek management approval to put their list of fire-prone owners to constructive use:

This is a list of the most fire-prone property owners. Some are very substantial owners with average fire accident rates. (The town's number of building units divided by the number of accidental building fires in an accident year.) Some of these owners are negligent owners maintaining improper conditions which contribute to avoidable accidents. Some of these owners may be engaged in arson, or having them set. Some are the victims of unusual bad luck with problem tenants and juvenile vandals. However, all of them are also the legitimate objects of public efforts to reduce their risk of fires.

Some other aspects of organized crime investigation can be carried into economic arson intelligence systems. One is the notion of listing supporters and associates of the most fire-prone owners. The prosecution of arson conspiracy cases has shown again and again that where owners get away with the same crime repeatedly over a long period in one place, others become involved in ever-widening conspiracies. Therefore, links among arson-prone owners may be the first indication of such a conspiracy or may indicate the existence of a series of conspiracies.

Many organized crimes have secondary actors who help link up the criminal networks. For example, burglars can be traced through the receivers (fences) and dealers of stolen goods, as well as through tipsters and "set-up" men. Arson groups have been organized by, or have included--on occasion--representatives of such fire-related professions as insurance agents, public insurance adjusters, fire rehabilitation contractors, board-up servicemen, salvage companies, glass companies--almost anyone regularly involved in any aspect of fire. Because the real estate business is so dominated by leveraged (i.e., mortgaged) activities, credit sources are important to every real estate enterprise. Private lenders and even personnel in thrift institutions have been implicated on occasion in arson-for-profit conspiracies. Routine intelligence could be gathered on the associational networks of fire-prone owners, including credit unions and thrift institutions which grant mortgages to fire-prone owners on a consistent basis. A listing of all potential insurance payees for each claim seems essential for evaluation of motive in a suspicious fire, given some of the complicated arson-for-profit schemes now in use. Such a list would include the first and sometimes second and third mortgagees--who might have an arson motive.

In summary, both the "known violators" and "supporters/associates" listings are techniques which can be adopted from organized crime control investigation for use in economic arson control.

One other kind of product can be assembled from the routines of research proposed below. It is a series of studies that may help to form future priorities for arson investigation, and even fire prevention activities. If every major fire is investigated for the economic background of the principals, the average economic backgrounds of the area's burned buildings can be compared with city-wide averages, or selected control buildings. The result can be comparisons of such statistics as tax arrearages for different owners, parcels, or sections of the city. This approach is discussed more fully under "Level III" research, below.

A. Level II: 10-Year History for an Individual Building

This type of intelligence effort is suggested as a basic level of economic background research for most buildings fires. It should be done as routinely as a cause and origin examination at suspicious and undetermined losses, fatal fires, and even accidental fires above a certain dollar amount. Based on both scene and economic examinations, a decision can be made for possible further investigation.

Why do this, even where the fire has been attributed to an accidental cause? Because the economic background provides another viewpoint (a "second opinion") which can be compared with results of the cause and origin examination. Many professional arsonists try to conceal their incendiary devices, and several have been known to mimic accidental fires, particularly electrical fires. Thus, a second, fresh viewpoint on motive can be helpful, and it can come from economic analysis.

Fire scene investigation is dirty and difficult work. Many things are missed because of darkness, heat, or being rushed. There are mistakes, and sometimes there may be a lack of dedication on the part of overworked and undertrained personnel. Every now and then a cooperative witness will admit to fires that have sat around in the files for months or years, labeled (incorrectly) as "accidents." A routine, economic check on those incidents would have cast suspicion very early on many of these accidents. While no prosecution might have developed, a name would have gone onto the investigator's "think-about-it" list, and perhaps that owner would have been investigated more thoroughly the next time he or she suffered a fire.
Such development of background files might take as much as half again the amount of the research time, in terms of sorting and typing names onto paper. However, as time goes by, a fire-prone owner list is developed—a list which is accurate and precise as to owners of record. The list can be used by new personnel on the arson squad, and not just carried around in the memory of one person who eventually retires or is transferred out of the fire investigation unit. This list meets all tests of fairness and can be used as the basis of selective fire prevention and code enforcement inspections.

Another file can be built up of potential insurance payees on fires. This refers to mortgage holders (including banks), second mortgage investors, lien holders, etc. This listing, among other things, provides a guard or hedge against being misled or confused by "straw" ownerships. In many highly financed buildings, mortgage holders may be the only possible insurance beneficiaries of an arson fire.

After a period of research routines, described above, the user can go back through the files and test some ideas about economic intelligence. For example, one may ask how many of the fires in these classes were in buildings with substantial tax arrears, code violations of certain types, or heavy mortgage financing? Everyone has vague ideas along these lines, but routine economic research enables one to make more precise assessments and informed judgments. A fire wave in a particular neighborhood is often vaguely attributed to speculators. A property research file may provide a more firm hypothesis or inference; at least until a thorough investigation can resolve this question. Rumor may have it that established local owners are being plagued by vandals from outside the neighborhood. The property file can rule out other explanations and perhaps may support this. Some of the long-term economic studies can serve as the basis for fire prevention plans, even the background for remedial legislation.

B. Level II: 10-Year Listing of Owners of Other Properties and Other Fires

Obviously, if research is done at Level I for a ten-year period, the owners' other fires will all be in the card file. If not, a full-scale search through the indexes at the local Registry of Deeds office is required. This provides many kinds of information with both immediate (tactical) and long-term (strategic) intelligence value. For example:

- The ten-year listing provides a considerable feel for the evolution of a real estate firm's business as a whole. Is this person expanding, on the skids, getting out gracefully, or stable? Is he/she in trouble on other properties or loans, providing a possible motive for the fire in the building researched in Level I?
- The listing also can identify associates of fire-prone owners. Has this person bought from, sold to, or been financed by another fire-prone owner? From this question can flow decisions to go into major investigations of fire-prone groups.
- The list of previous fires of the subject owner is perhaps the most relevant and striking index of possible moral hazard. Although a lot of previous fires are not evidence of arson, they are very suggestive about the character of the owner. Police routinely use arrest records in evaluating suspects in criminal investigations. Arson investigators could reasonably do likewise, using previous suspicious fires as an index, which is weaker than arrests, but still informative.

By this same rationale, estimates can be formed from histories of code violations. These are, after all, violations. They carry small penalties and do not usually go to court, but it is worth considering that someone who habitually violates, e.g., the sanitary code, may be more likely to cross the line into arson than an owner who abides by the law in repairing his buildings.

A variety of economic studies are possible. One phenomenon noted in Boston is the grouping of property into three classes by size: (a) owners of one to three buildings, accounting for about 40 percent of building fires; (b) owners of four to fifteen buildings, accounting for 40 percent; and (c) larger owners, for 20 percent. The medium group of owners have a disproportionate number of fires, which suggests several possibilities: there is considerable arson for profit, that some of it is conducted by regular networks of people, and that speculators are likely to be involved. It should be added that all of these possibilities are supported by the fact that medium-sized owners generally fall into one of two groups—those experiencing few fires versus those with many fires.
C. Level III: Control Research

This intelligence function involves research into buildings and owners that did not have a fire. While it may seem odd to do research on a building that has never had a fire, the reason to do so is to set baselines. This is useful because researchers otherwise can get a warped impression of the world by looking at nothing but buildings that have fires.

It is useful in arson investigation to know what is a "normal" lodging house owner's fire record. Does Mr. X have the types of fires everyone gets in that business, or is he exceptionally fire-prone? It is good to know what "normal" apartment house financing looks like, so a guess can be made on whether there was a motive to burn a particular building.

It may be that the workload demands of the investigator inhibit the completion of this control research, but it should be pointed out that it makes economic studies of the sort discussed above much more accurate. A control group of buildings without fires is desirable in order to make any generalizations about buildings that do have fires. For example, it may seem very interesting that 60 percent of the buildings that burn owe back taxes, but it is not if 60 percent of the buildings that do not burn in those neighborhoods also owe back taxes.

There is something to be said for looking at a question the other way. Typically, in researching the history of some burnt-out shell, questions are asked like, "Why did this fire happen? Who wanted it to happen?" It is good sometimes to research a building in a bad area that did not burn, just like doctors ought to study a healthy person now and then to see why he or she survived or stays well.

D. Level IV: Early Warning Systems

Most firemen employ some kind of an early warning system. Cynically, a fireman may tell someone as they drive around, "That one looks about ready to go." Several teams of research investigators are now experimenting with arson early warning systems based on different mixes of moral hazard background data, economic study, and historical and geographical fire information. Whether these systems will work or whether they can be made cost-effective are questions that require a lengthy argument--longer than the space available here. However, early warning systems should be listed as a type or level of intelligence because that is really what they are. Even the most sophisticated computer program for an arson prediction system is nothing more than a structured plan for using economic, criminal, and fire data, which is to be studied carefully and turned into a prediction system.

Informal predictions by firemen, and more formal ones by arson investigators, are an important part of investigation and prevention of fires. All the economic intelligence routines discussed above in Levels I, II, and III will produce a certain amount of prediction. Table 4 shows the cyclical nature of detection, prediction, and prevention of arson. Although the chart was intended to relate to specific computer analysis of criminal investigation data, it applies broadly to all kinds of intelligence about arson.

*See discussion of several demonstration projects to develop Arson Information Management System, in Part I of this Manual, Chapter 9.
A "straw" is a person or business entity appearing in property records as being the owner of a property, while actually acting as a "front" for the real owner. Straws may appear on paper as individual owners, trustees, corporate officials, shareholders, or any other form of owner or interested party.

Straws are used for a variety of reasons, not all of which are illegal. One type of straw is used to negotiate for and buy property in secret. This type is used to avoid raising the market value or to avoid adverse community reaction. Such a straw is ultimately revealed when the property is transferred to the real owner.

A common use of straws is to avoid legal liability. The straw usually owns a property individually, and thus is subject to suits of all kinds. But since the straw has few or no personal assets, the liability ends up being limited to the one property owned, which is often the straw's only tangible asset. Such straws are said to be "judgment proof" as they have no outside income or property for a court to seize.

One straw seen frequently in arson research is a person who "buys" a property after a fire, but before the city orders the building torn down. This "demolition straw" has no assets to pay for the raze-and-fill job, so all the city can do is go ahead with the razing on its own budget, and put a lien on the vacant lot.

Straws can be used similarly in tax foreclosure situations to avoid real estate taxes. Often there is a law that a person who loses a property to tax foreclosure cannot buy it back at auction. But such an owner can sell to a straw before the tax lien is attached, and buy back the property under his/her own name at the auction. Or the owner can allow the property to be foreclosed, then have the straw bid for it at the city auction. Either way, the owner retains control of the building, and avoids several years of tax payments.

Straws can also be used in arson conspiracies to obtain insurance coverage for known arsonists or arson-prone owners, or to obtain and hold mortgages which further conceal the true owner.*

*Where the straw falsely represents to a bank or savings and loan association that he or she is the actual owner, the straw may be liable for prosecution under a variety of federal and/or state false statement statutes (e.g., 18 U.S.C. secs. 1010, 1014). This is also true if the straw applies for a federally guaranteed mortgage, HUD program loan, or other federal subsidy, and misrepresents either the true ownership or any entry on a pertinent financial statement.
Straw ownerships can be set up with concealed legal contracts between the straw and the real owner, including annual wages and agreements about various contingencies. One of the simplest ways to set up a straw is to arrange the original sale to the straw. At the same time a deed (usually a quitclaim deed) from the straw to the real owner is signed, but kept and not filed by the real owner. When the real owner needs to take title to the property, he pulls this deed from the safe, registers it legally, and, in many states, becomes the owner retroactively to the signing date of the deed.

The straw can be a family member, close friend, employee, in-law, or other person with whom no written contract is necessary because persuasion and other non-legal means can be relied upon to enforce compliance with the terms of the contract—whatever they may be.

Straw ownerships are generally legal so long as they are not used for illegal purposes. However, typical illegal purposes are tax fraud, insurance fraud, credit fraud, illegal attempts to avoid civil suit liability, and concealing assets in a bankruptcy. As a practical matter, straws are not routinely investigated, so there is a chance that a straw could be used if it is properly instructed. If the straw has been carefully instructed, it is hard to prove that he or she is not the real owner of the property, or a legitimate business associate of the real owner. So, while many straw arrangements are legal, they may be characterized publicly as "sharp," "shady," or even "unethical" practices.

In time most straws reveal themselves to patient investigators:

- The straw either buys from or sells to the real owner in every case, usually without cash equity.
- The straw is a relative of the owner.
- The straw is unknown to the tenants; the real owner collects the rents. Significantly, for purposes of arson investigation, he also makes insurance, utility, maintenance, and other payments—often traceable because checks are used.
- The straw is a person obviously without assets. The straw is single, or on welfare, or elderly, or retired, and lives in rental housing.

In any single case, the investigator may ask, "Whose straw is this person in question?" Consider: the straw's employer, the owner of the building where the straw lives, a well-known landlord who uses the same management company, attorney, notary public (on deeds), broker, contractors, and tax lawyers as the straw. These leads are not decisive, but suggestive of directions in which the arson inquiry might go.

One special case is the lawyer (often a real estate conveyancing attorney) who stands as a straw trustee or corporate officer for a client. Such arrangements are seldom revealed—until the building is sold, if ever then.

When investigating arson-for-profit schemes, straws can present some difficulty. However, most can be guessed at with the methods listed above, but they often remain listed in files and investigative reports as "close associates" or "probable associates" of the real owners. Many straws will readily admit such relationships when interviewed, and an owner rarely uses more than a few straws, so treating the straw as a real owner will still allow one to pursue the fire record and management reputation of that property ownership, whether it is real or straw.

Because arson has been so easy to perpetrate and get away with, arson conspirators may not bother to use a straw in an arson fraud scheme. The straw arrangement can be more suspicious, especially to an insurance company, than the incendiary fire itself! This may change as community groups and law enforcement agencies use property research to target fire-prone owners. Straws may then become a necessary and more commonplace element in arson-for-profit schemes, which we have already seen in many cities throughout the country.
Appendix II

Tactical Intelligence on Economic Arson:
Analysis of Real Estate Records

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From a research and investigative standpoint, there are major differences between real estate and commercial businesses. Instead of inventory, the owner has buildings. Real estate is usually highly leveraged (mortgaged), because of the structure of tax deductions for real estate investment. Since for tax purposes the owner may want it to appear, on paper, that he is not making much money, the arson investigator faces several difficulties in making the most basic evaluation of real estate financial records. He must ask, "Was this building making money for the owner when it burned, or was there a possible motive to 'sell it to the insurance company'?

Sources of Real Estate Financial Information

Unlike a commercial business, a real estate firm makes money in five different ways. (However, the fifth is a special way of accounting that is often used for tax reasons.) These are:

1. Cash Flow. This refers to income from rents that exceeds expenses, including debt service. Thus, fire investigators should determine the vacancy/occupancy situation of the building under question.

Cash flow can be increased by raising rents, or by decreasing expenses, beginning with the reserve fund for major repairs. Then owners can terminate or scale down routine maintenance, and payment of utility bills and taxes. Where municipal tax collection systems are weak, some owners can make a whole business out of running buildings while building up delinquency. As less money goes back into the building, its future as rental property is reduced. Because this contributes to neighborhood decline (as well as the eventual prospects of arson in the deteriorating building) the practice is criticized widely, but it is still common to find it. The street phrase for this is "milking," taking money out of a building without putting anything back in.

*It should be noted that almost every real estate business accounts profitability on an individual building-by-building basis.
The less actual money the owner has invested (i.e., equity) and the more he has borrowed, the more magnified are the positive and negative changes in cash flow. The real estate industry often uses a ratio called "cash on cash" (cash flow to cash investment) to express this potential to possible investors.

Cash flow is the most important aspect of profitability. Only long-term investors or established speculators can look at negative cash flow philosophically, while considering the mitigating effects of the other three profit aspects. The more leveraged and speculative real estate investors must keep cash flow in the black. "Milkers" are in it mainly for the cash flow, often using cash flow advantages to overcome problems like tax foreclosure, bank foreclosure, and declining neighborhoods.

2. Equity Build-up. As an amortized mortgage is paid back, the principal is reduced. The owner has a second form of income in his increasing ownership of the building. While this profit can only be realized when the building is sold or refinanced, it is taxable at the lower capital gains tax rate, rather than as income tax.

In order to maintain high cash-on-cash returns, real estate owners try to keep equity down. The ideal is to refinance every five to ten years, although interest rate changes of recent years are altering this strategy. The old rule was to avoid equity build-up, and instead refinance by using the capital gain to buy other highly leveraged buildings. This financing system has allowed real estate speculators and investors to build vertical pyramids of property holdings.

3. Increase in Market Value. This is the speculative area of real estate. Many economic and social factors determine whether a given building will rise or fall in value over time. The situation is often complicated by investments in building rehabilitation tailored to an expected change in occupancy over time.

Although abnormal fluctuations in the housing market may offset weaknesses in the cash flow of the given investment, it is not usually the financially sound investors who get into that situation. When a novice operator gets into an investment needing both cash flow and big market value gains, the situation is doubly risky, and arson for insurance fraud can result.

Such speculative plans often come apart at the point of transition. The owner can find problems with existing tenants who are difficult to evict, with zoning authorities, with contractors, or with consummating the intended sales. If any such obstacle prevents the sales, arson may be a profitable solution.

4. Tax Shelter. Because depreciation is deductible against income (for federal income tax purposes), the advantageous situation is to show a "loss" through depreciation in a building with positive cash flow. The value of this loss varies according to the owner's other income. Thus, a lawyer in the 50 percent tax bracket may save much more with tax shelter income than a real estate broker with less personal income.

Investigators should bear in mind that "no one makes money by actually losing money." Thus, negative cash flow is always undesirable. The "loss" involved in depreciation exists only on paper.

5. Management Fees. This is not a source of income per se, but a way of accounting that is commonly used by very large property owners. The management fee shows up as an expense to the building, where it lowers taxable cash flow or increases depreciation tax shelters. It is taxable income for the management, which can be an individual with other tax shelters, or a corporation with a lower tax rate. Depending on the true costs of management, some money can be saved if the tax liability can be reduced. Thus, the investigator should be aware of this when reading the financial statements of a given piece of real estate, and he should ask the question: is the management fee going to the owner in another, disguised form?

The most common "set-up" is the incorporated management company by which a wealthy property owner takes 9 percent off the top and puts it into his corporation. The advantages to him are similar to those of an incorporated professional.

Where Can We Find Financial Statements for Real Estate?

1. As with business statements, balance sheets are made up for prospective buyers. Such a sheet is called a "set-up" in the trade, and a hypothetical one is discussed below. Note that the set-up combines features of the balance sheet and the operating statement as explained in Loretta Campbell's paper. Set-ups often combine actual and anticipated income. Because they are a selling tool, they are often exaggerated or deliberately deceptive.

2. Banks and other mortgage or contract lenders are often given financial data as part of a loan application. Typically a mortgage investor will get an estimated income statement similar to a set-up; sometimes there will be an actual income

statement, or even a monthly cash budget. Banks may also require a total income statement on all of a person's holdings, or other financial background data.

3. In some jurisdictions tax assessors use the capitalization of income method to set values on rental housing. This calculation is discussed below, but would require an income statement be presented to the assessors. Property owners who dispute these findings file requests for abatements, and these also often contain figures on income.

4. In a few cities and towns rent control exists or existed for a time. Such regulatory systems require landlords to file at least rent data, and often other business details, especially when applying for rent increases.

"SET-UP" FOR: 657-659 BEACH STREET

**Description:**

This building is an eight-unit dwelling in a declining neighborhood. It is selling for $100,000 (asking price).

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rents</td>
<td>$16,000</td>
</tr>
<tr>
<td>Vacancy and collections</td>
<td>$1,000</td>
</tr>
<tr>
<td>Net Rental Income</td>
<td>$15,000</td>
</tr>
<tr>
<td>Operating Expenses</td>
<td></td>
</tr>
<tr>
<td>Maintenance and repairs</td>
<td>$1,200</td>
</tr>
<tr>
<td>Management</td>
<td>800</td>
</tr>
<tr>
<td>Taxes</td>
<td>2,000</td>
</tr>
<tr>
<td>Insurance</td>
<td>1,000</td>
</tr>
<tr>
<td>Net Operating Income*</td>
<td>$10,000</td>
</tr>
<tr>
<td>Mortgage interest and amortization</td>
<td>(8,703)</td>
</tr>
<tr>
<td>(Cash Flow before Taxes, i.e., net operating income minus mortgage and amortization)</td>
<td>$3,297</td>
</tr>
</tbody>
</table>

*Also called Cash Flow from Operations, Cash Flow Before Financing, Operating Cash Flow, or Free and Clear Cash Flow.

**Ratio Analysis of Set-ups**

Ratio analysis of real estate is difficult because there are so many variables, particularly in the smaller buildings, where much of the arson-for-profit takes place. Since most of the ratios are aimed at setting market values, this discussion will begin there.

1. **Gross Rent Multiplier (GRM).** This simply divides the market value by the rental income. On 657-9 Beach Street, the GRM would be 6.25. As with similar multipliers used on common stocks, a considerable range might work under different situations for different owners. Note that this measure does not take into account any variables in expense such as taxes. For this reason, the GRM is not widely used among sophisticated investors. When it was popular, GRMs of 6 and 7 were thought to be very good, with numbers as high as 10-12 permissible in "speculative markets." The more solid the investment was thought to be, the higher GRMs could be allowed to slip, while some slum buildings sold for GRMs of 4-6.

2. **Net Operating Income Multipliers.** This has the advantage of taking expenses into consideration. A good number is thought to be 10, with modern buildings running to 7-9 (due to cheaper maintenance costs). There is less variation here than in GRMs. Note that our building had a very favorable GRM at 6.25, but a mainstream figure with this ratio of 10.

3. **Capitalization Factors (Cap Fac).** This method is now taught in business school real estate courses and is the usual basis of discussion in tax assessment journals. There are various forms of capitalization calculations, but all have the general formation that capitalization rate is the cash flow divided by the value. Notice that this makes the number the inverse of the multipliers above.

Lenders usually use net operating income, which would give our property a capitalization factor of .10. Notice that if rents on our property went up $5,000 a year, this "Cap Fac" would become .15, while the GRM would go from 6.25 to 5. The lender typically wants to know the market value, and uses a predetermined cap factor, which is usually a certain amount higher than the prevailing interest rate.

Property investors usually derive a cap factor from Cash Flow before Taxes, divided by equity. This figure is different from the lender's calculation above, but related to the rate of return. If our building were financed at 90 percent, equity would be $10,000 and this cap factor would be .13. If, however, financing was only 80 percent, the cap factor would be .067.
Other Issues to Examine when Reviewing Ratios:

Rent. Raising rents is the major way to affect both cash flow and such ratios as GRMs, unless this policy affects vacancies and collections (see next item, below).

Vacancy and Collections. This figure is usually estimated at 5 percent of gross rents, and for profitability it should be held to such a figure. For Beach Street it is set realistically. Higher. Vacancy can cut into rent revenues rather easily. The $1,000 entry in this set-up allows five apartment-months of vacancy, but if buildings in this neighborhood have a 50 percent turnover, which is quite possible, this allows only about three weeks to fill each vacancy.

Maintenance and Repairs. This number ought to approach roughly 10 percent of gross rents. In addition, the set-up ought to contain another item for Major Repairs and Reserve, which is another 10 percent, if not more, in a run-down old building. What if a new roof or a new furnace is needed? Maintenance and repairs are often more than 10 percent on older and smaller buildings like ours, but of course the owner decides what to spend. This is a major area for cutbacks that increase the cash flow for a while, at a cost in the long-term condition of the building.

Management. (See discussion above.) Typical costs of management are 3 to 5 percent, but rates often go up to 8 percent for accounting reasons. As a general principle, management ought to cost more in a smaller building than a larger one, but this is often a service provided by the small landlord on his own time.

Utilities. Not an owner's expense in our property. A good thing, too, with energy prices increasing steadily. They used to be another 10 percent cut on most set-ups.

Taxes. These vary widely from jurisdiction to jurisdiction. Where taxes and insurance are more than 20 percent of net rental income, the situation is questionable and should be examined for a determination of what may be behind this.

Profitability.

1. Cash Flow. As set-up, this property yields a cash-on-cash rate of return of 12.97 percent. Note that this set-up does not include the item "Replacement Reserve," which could easily reduce this figure to zero.

We are presuming that the building is financed at 90 percent for 25 years at 8.5 percent, fully amortized. Changes in any of these terms would affect the cash-on-cash ratio. For example, 80 percent financing would involve only $7,736 in debt service, which would raise the Cash Flow Before Taxes (CFBT) to $2,364. But the cash-on-cash rate of return would be only 11.82 percent. This is one of the advantages of leveraging in real estate.*

One quickly becomes obsessed with cash flow. Consider what happens if we invest in $4,000 worth of cosmetic repairs, then raise rents by $50 per unit. The work is paid for in one year. After that the CFBT goes up $4,000 a year, for a cash-on-cash return of 63 percent.

The same effect can be achieved by cutting out the expenditures for maintenance, repairs, and taxes, and ignoring the management fee. Of course, municipalities can foreclose on a building for tax delinquency. But if this takes four years, for example, the yearly rate of return is still 38 percent, even with the loss of the equity at the end. Two vacant apartments put the owner 16 percent "in the red."

2. Equity Build-up. In the financing described above, equity build-up is about $1,000 a year. If the building is eventually sold, this money can be realized and would make a true rate of return of 23 percent.

Because of the paramount importance of cash flow to many investors today, equity build-up is often sacrificed in financing. Instead of fully amortized notes like the one we used, many operators are going into standing mortgages of "balloon notes" which have lower monthly payments because only interest is paid. All the principal is due at the end of the note, when it can be paid off by selling the building, or by refinancing. Because a balloon note is a bigger risk, higher interest is charged. (The classic use of this form of financing was in short-term loans for new construction.) But this is less important to the cash flow operator than keeping the monthly bite down.

A more moderate strategy for lowering debt service and equity build-up in today's loan market is to extend the life of the note.

Because (a) the nature of mortgage arrangements varies, (b) is not publicly recorded, and (c) is very important to the profitability of buildings, investigators may want to consult accountants in this type of issue.

*There is a point at which it is not advantageous to leverage; beyond that point one encounters "negative leveraging."
3. Market Values. The most brutal measures to increase cash flow inevitably decrease market value by destroying the building itself. This is probably the most common background scenario affecting urban arson-for-profit. Buildings become overinsured merely by the milking process, with its reduction of values. When the building will no longer produce cash flow profits, (because the burden of overfinancing has exceeded the value of rents) then it is torched.

Recent inflation has made most rules of thumb about market value appreciation obsolete. Just to demonstrate the situation, let’s suppose that Beach Street appreciates 2 percent a year. That would be $2,000, less 35 percent capital gains tax, or $1,300. Thus a rate of return incorporating cash, equity build-up, and market value appreciation would be 36 percent. However, this money cannot be realized until the property is sold.

4. Tax Shelters. Of the yearly debt service on Beach Street, $7,650 is interest which is deductible against operating income, for federal income tax purposes. So is depreciation, a special tax break for the real estate industry. The maximum depreciation for Beach Street would be calculated by the 125 percent declining balance method, and would give additional “losses” for tax purposes of $6,250.

Thus, a tax accounting of this building will show a $3,900 loss, which can be used on U.S. IRS form 1040 to offset income from other activities, including real estate brokerage or management costs. For a taxpayer in the 50 percent bracket, this saves $1,950 in actual money, which would bring the return from this building, on cash investment, to upwards of 56 percent a year. Note that the owner gets the full tax benefits of depreciation despite the highly leveraged purchase; this is another pressure for heavy debt in the real estate industry.

Conclusion

The typical problem of the real estate business is not liquidity, but cash flow from rents to cover operating expenses. So long as a modest CFTR can be maintained, building ownership looks attractive to most investors. However, only a few vacancies or a big repair item can turn the whole scheme upside down; or into a short-term lose problem.

The arson investigator will determine those vacancies or that repair item quite early in the course of a check on the owner’s motive. Later on, the arson investigator may examine financial statements to see how damaging these cash flow items would have been.*

*See the paper Target Co., Inc.: Balance Sheet, by Loretta Campbell, for methods to review and analyze financial statements.
Recommended References


   Has breakdowns of average gross rents, various kinds of expenses, and turnover rates by age, size of building, region, and metropolitan area. Figures are expressed in dollars-per-room (with a system for counting rooms explained in the back) as well as percentages of gross rents. Figures are given for elevator buildings, low rise 12-24 units, low rise 24 and up, and garden apartments. Thus the reader will have to adapt figures if the typical housing subject to arson in your jurisdiction comes in smaller sizes.


   Similar to the above for office buildings and skyscrapers.

   Similar problem in that the smallest categories are four-story and less, and 50,000 square feet and less, which again are larger than many of the commercial and semi-commercial losses that require investigation for arson.

3. The Dollars and Cents of Shopping Centers, by the Urban Land Institute, 1200 - 18th St., N.W., Washington, D.C. 20036. (Also available are many other publications on shopping center finance.)

OTHER SOURCES:


PERIODICALS


9. National Real Estate Investor, a monthly publication, $35/year, Communications Channels, Inc., 6285 Barfield Road, Atlanta, Georgia 30328. It includes FHA data on vacancy rates for all Standard Metropolitan Statistical Areas, historical data, commercial, office, and industrial rates per square foot.
Outline of Steps to Uncover Hidden Ownership and Financial Interest

By Richard Jaffee
Organized Crime Bureau
Dade County Department of Public Safety
Miami, Florida

I. Piercing the Corporate/Nominee Veil*

- Where to look for information concerning the true ownership of properties identified as actual or potential arson targets. While much of the intelligence sought is a matter of public or private record generally available to a resourceful investigator, some of the data (from banks, for example) may only become accessible if the investigation is conducted jointly with a local, state, or federal agency with subpoena power.

A. Surveillance

1. Registration of motor vehicles utilized by suspected principals and/or managers of property may disclose the identity of individuals or entities involved and establish a pattern of relationships among them.

2. Observing and identifying lesser employees of the property owners may lead to a disgruntled individual with first hand knowledge about the concealed ownership of the property.

B. Public Records - Concealed owners, or persons who can lead you to them, may inadvertently reveal themselves in property-related dealings.

1. Litigation in local courts (indexed under name of nominee and suspected principal, if known.)

2. Building and zoning violations.

3. Municipal licenses.

4. Requests for municipal services.

5. Police complaint files from present or former tenants (identified by interviewing beat patrolman.)

* Assuming the investigator has already checked the conventional real estate records in the courthouse at the county seat, and has reason to believe that the real owners are concealed behind a domestic or foreign corporate or nominee facade.
6. Small Business Administration loan application files.

C. Private Records
1. Loan application files of factors or mortgage companies.
2. Realtors or business brokers who may have been approached to handle sale.
3. Contractors who may have been hired for repairs or additions.
4. Insurance company claim files (to trace disposition of any prior settlement proceeds.)
5. Vendor's company or bank account records (to determine source of funds used to pay major expenses of subject property.)
6. Tenant or major customer records (to trace disposition of checks paid for rent or purchases to property owner.)
7. Buyers of any incidental assets of property (i.e., cars, trucks, machinery, etc.) will have records reflecting disposition of proceeds.

D. Bank Records
1. Signature cards for corporate/nominee bank accounts will identify person(s) having signatory withdrawal authority from account.
2. Disposition of major withdrawals from property bank account may be determined by examining endorsements on microfilmed copies of checks disbursed. Do not overlook cashier's checks purchased or direct bank transfers.
3. Loan files, including those of suspected principal, if known (to determine if subject property has been listed as an asset on the suspected principal's financial statement.)

II. Reconstruction of Missing Records - So as to arrive at a reasonable estimate of the property's profit or loss during recent fiscal periods in order to determine the relationship of this to insured value.

A. Residential or Commercial Rental Property
1. Collect rental income data by interviewing former tenants who may be identified by examining:
   a. Utility company customer records;
   b. City directories such as Polk's and Bresser's;
   c. Chamber of Commerce or similar local business organization lists of members for commercial tenants;
   d. Municipal agency complaint and violation files (i.e., Police, Fire, Building & Zoning, etc.);
   e. Litigation files in local court records (indexed by name of the registered owner--check both plaintiff and defendant indices); and
   f. Credit agency service files.
2. If bank records accessible, analysis of checks deposited to the property's bank account will provide income data for rents paid by check.
3. Records of local real estate brokers may contain income statements for the property submitted by owners during past efforts to sell it.
4. Former employees of the property can provide excellent leads to income and expense information and possible retained records.
5. Estimated expenses of the property can be obtained from principal vendors of goods and services to the property such as:
   a. Utilities--light, power, gas, water, telephone;
   b. Fuel--heating oil, coal, bottled gas, kerosene; and
   c. Contractors--plumbing, heating, electrical, roofing, painting, glass, janitorial, etc.
6. Real estate management and rent collection firms, if employed by the owners, should have excellent tenant and income records.

B. "Going Business" Property
1. If subject business has a few, large customers, their purchase records will provide data for reconstructing the gross sales of the business.
2. Sales of businesses such as bars and restaurants with a large number of small cash transactions can be reconstructed by applying the percentage mark-up method to purchase data obtained from their principal suppliers. (U.S. Departments of Labor and Commerce maintain statistical data on typical profit percentages for various industries and businesses in different geographic areas.)

3. If accessible, bank statements, deposits, and cancelled checks provide the best source of information from which to reconstruct records of income and expense.

4. Local business brokers who may have been contacted about selling the subject property may have been provided with profit and loss statements or copies of income tax returns.

5. Municipal or state sales tax records may reflect sales figures of the business for an extended period.

6. Credit card company records will contain non-cash sales information from which total income can frequently be estimated with reasonable accuracy.

7. Local or state tangible property tax records may disclose the size and value of business inventories on an annual basis.

8. Miscellaneous additional income from such sources as vending machines, juke boxes, etc., should also be included.

BIBLIOGRAPHY OF ADDITIONAL READINGS

1. Background: The Legal and Financial Structure of Businesses


2. The Nature of Fire Insurance


3. Determination of Fire Cause


4. Searching the Fire Scene

5. White-Collar Crime Approaches to Arson-for-Profit Investigations


6. Arson Investigation and the Prosecutor's Role


7. Special Arson Units and Task Forces


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