

LAW ENFORCEMENT MANAGEMENT INSTITUTE

ARSON INVESTIGATION IN TEXAS:  
AN ANALYSIS OF THE EFFECTIVENESS  
OF CURRENT TRAINING PRACTICES

A LEARNING CONTRACT  
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MODULE I

BY  
ROBERT J. CUNA

PEARLAND POLICE DEPARTMENT  
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A housewife who has been badgering her husband for several months to redecorate her kitchen decides to do it herself. She torches (sets fire to) the kitchen and immediately calls the fire department. The fire officers respond to the scene, extinguish the fire and, except for smoke damage, save the house from any further destruction. They effect salvage operations which involve sweeping out excess water to prevent additional damage (and, unfortunately any evidence of arson). The fire officers leave, patting themselves on the back for a job well done. The housewife submits an insurance claim and gets her kitchen remodeled with an additional bonus. The interior of the house receives a new paint job necessitated by the smoke damage.

A husband and wife decide that their house needs to be renovated, but realize they cannot afford to undertake the project. By mutual agreement, they commence to perpetrate a scheme to accomplish their goal. After purchasing turpentine and several gallons of paint at the local hardware store, they go through the motions of refurbishing the dwelling. Several days later they set fire to the house by saturating rags in turpentine, which gives the impression that the cause of the fire is spontaneous combustion. They call the fire department and proceed to give a performance that would be worthy

of an Oscar award. Upon the arrival of the fire equipment, the couple begins to complain to their neighbors that the fire officers took too long to respond to the alarm. The outcry is taken up by the neighbors and the accusation of the delayed alarm makes the headline of the local newspaper the following morning; therefore, the fire and police officials are forced to focus their attention on the supposed delayed response and not the cause of the fire. The result: the insurance claim is settled. Several years later the couple openly boast of their achievement.

A prominent individual owns and operates a very profitable manufacturing plant. It is so profitable, in fact, that the demand for additional products has outgrown the manufacturing and storage area of the present plant, which has no adjacent land for expansion. The usually law-abiding owner pays a professional "torch" to burn the structure making it appear to be an electrical fire. The owner believes because of his status in the community that even if an investigation is initiated it will not be thorough enough to prove any signs of arson. Another goal achieved--new plant--better location--no charge!

The individuals involved in these factual arson scenarios were not brought to civil or criminal trial, and the fires were never reported to local, state, or national agencies for statistical purposes. Why? Because when there is a lack of training, education, cooperation,

and experience on the part of fire, police and prosecuting attorney personnel, the crime of arson is undetected. It has been estimated by fire officials that at least one-half of the fires classified as being of undetermined origin are in fact incendiary (intentionally set).<sup>1</sup>

The crime of arson was barely mentioned or recognized by fire and police personnel, until the race riots of the 1960s drew the outrage of the public. In Detroit, damage from fire and looting was estimated at more than \$150 million, and, in the nation's capital, many parts of Washington had been reduced to smoldering piles of rubble.<sup>2</sup> The events also made police and fire administrators in most areas throughout the nation aware of the fact that their personnel were not prepared to investigate fire scenes. The authorities realized that no formalized training had been provided for police investigators in arson detection and investigation, and members of fire departments were only trained for fire suppression. The seriousness of the situation was compounded by the fact that the incidents of known structural incendiary and suspicious fires had increased in the nation from "44,100 in 1967 to 177,000 in 1977 with a total monetary loss of \$2,666,600".<sup>3</sup>

These figures, as significant as they are, did not take into account the monetary loss for automobile and woodland fires. It should be noted that the totals were

only estimates made by the National Fire Protection Association. Official statistics were not available until the Anti-Arson act of 1982<sup>4</sup> authorized arson to be classified as the eighth index crime,<sup>5</sup> thus requiring the collection of data concerning its nature and extent by the Federal Bureau of Investigations Uniform Crime Reporting Program.

In addition, the Supreme Court decision of Michigan v. Tyler applied the Fourth Ammendment, including the requirements of a search warrant to fire scene examinations.<sup>6</sup> The decision required a radical change in the manner in which fire scene searches were to be conducted. Traditional practice had always allowed officials to re-enter the fire scene days and sometimes weeks after the fire was extinguished, to determine the cause and origin and to collect evidence. All of this was done without being required to seek authorization from the homeowner or obtaining a court order. The Tyler ruling made it clear that fire scene investigators had to be afforded education concerning the Fourth Ammendment laws of unreasonable search and seizures.

Consequently, the Tyler case was responsible for bringing several new dimensions to the technique of arson investigation. In 1979, the University of New Haven began offering a certification program in arson investigation, which consisted of ten courses of three credits each from

both the Fire Science and Criminal Justice curriculum of the university. At that time, director Fred Mercillott, stated, "This is the only such program in the United States".<sup>7</sup> Other agencies, realizing that the knowledge of fire and police officials should be combined, began forming joint task forces to combat the growing assault of incendiary fires. The most notable merger was in 1979, when the Law Enforcement Assistance Administration (LEAA) and the United States Fire Administration (USFA) announced that they had joined forces to attack arson on a national scale.<sup>8</sup> Under the agreement, the USFA had the primary role for providing technical assistance in fire investigation and fire training while the LEAA provided assistance for criminal investigation and prosecution.

Following the lead of the two national agencies, a number of cities throughout the country implemented the use of prosecutors on their task forces. The addition of prosecutors enhanced the performance of police and fire officials and also allowed the prosecutors to gain fire scene investigation experience.

The task force approach, identified by many names (e.g. Wishbone Attack, XYZ Theory, Arson Squad, A-Team, Strike Force) throughout the country, has been effective. The methods used by the Vermont State Police Arson Squad proved to be one positive approach to the arson problem by recording a 27% decrease in arson.<sup>9</sup> The squad also

credited their success to continued training and experience. The decline of arson-for-profit on a national level has been credited to the investigation agencies that are pooling together and combining their investigative talents.<sup>10</sup>

As a certified instructor of arson investigation for the State of Texas, this author can attest to the lack of training, education, cooperation, and experience encountered by fire, police and prosecuting attorney personnel within the state. Of the many factors that contribute to the successful prosecution of an arsonist, training must be considered the key ingredient.

The lack of training compounds many problems in any criminal investigation, but the crime of arson may be most affected. Without training, there will not be an adequate investigation that would lead to accurate reporting and data collection. Without adequate reporting, a problem cannot be clearly identified. According to Ms. Jean Mitchell, State Fire Marshal's Office (telephone interview, 8 January 1990), of the 1,620 fire departments in the State of Texas, only 308 report to the Texas Fire Incident Reporting System (TEXFIRS), which is monitored by the State Fire Marshal's Office and the State Board of Insurance. Possibly, the lack of reporting can also be attributed to the vast number of volunteer fire departments in the State of Texas, whose members are not afforded the time or training to investigate fires.



In 1988, the 308 departments, which represent 74.3% of the population of Texas, reported a total of 102,849 fires. There were 9,356 incendiary fires which destroyed an estimated \$51,849,427 in property, killed eleven people, and injured 273 individuals. Another 9,449 fires were reported as suspicious, which caused an estimated \$33,050,709 in property damage, eleven deaths, and 176 injuries. Fires of unknown cause numbered 39,164 resulting in 101 deaths, 549 injuries, and an estimated \$101,891,831 in property loss.<sup>11</sup>

In addition, even though the figures are staggering in themselves, it should be mentioned that some dollar losses for fires were not reported because of lack of time and/or information prohibited the estimation of losses. Also, the major cities of Odessa and Wichita Falls did not report (the failure to report by these two cities was not explained by the State Fire Marshal's Office). Both cities also failed to report in 1987.

When the causes of 48,613 fires, 112 deaths, 725 injuries, and \$133,942,540 in property damage is listed as suspicious or unknown, it tends to indicate that the responsible agencies for detecting and reporting arson may not be adequately trained. Unfortunately, the perplexity of this situation is growing larger. The 1988 (TEXFIRS) reports indicates an increase of 1,167 incendiary,

945 suspicious and (the most staggering increase) 4,578 unknown origin fires in one year.

Perhaps John Barracato, director of the Fire and Fraud Investigation Section of AETna Life and Casualty, described the situation best, when he said:

Arson is different from any other crime because it's generally the only crime that requires an expert to determine whether a crime was actually committed. Unlike burglary, assault, or first-degree murder, arson is difficult to assess because the evidence is usually nothing more than a pile of twisted metal and charred wood. A trained<sup>12</sup> expert is needed to classify arson as a criminal act.

The lack of training in Texas may be attributed to the apparent indifference exhibited on the part of police and fire administrators. Many police chiefs are of the opinion that fires should be dealt with by fire department personnel. Conversely, fire chiefs contend that their personnel are not prepared to initiate criminal investigations. The end result of this complex situation has a direct influence on both police and fire academies. This author has personally interviewed over one hundred police and fire officers that have participated in fire and arson investigation classes. The overwhelming response when asked what arson investigation training they had received, has been that they had not received any arson investigation training in either their police or fire academies.

According to Jean Mitchell, (telephone interview,

11 November 1989) of the more than 45,000 full-time certified peace officers in the State of Texas, only 453 are certified arson investigators. Fifteen are employed by the State Fire Marshal's Office and sixty for the Houston Fire Department. This leaves a total of 378 qualified arson investigators for the remainder of the State of Texas.

The lack of available trained personnel for those agencies that are concerned with fire cause and origin creates an even greater problem for arson investigation in Texas. It compels untrained police and fire representatives to conduct potentially superficial, incomprehensive, and possibly unconstitutional searches of fire scenes which results in inadmissible evidence, loss of convictions, and loss of credibility.

The following statements are typical of those received from fire and police officers replying to an arson investigation course assignment given by this author. The assignment required the student to submit a short paper describing the arson problem in his community. A sampling of the responses are listed below according to the student's job perspective, in his own writing:

Fireman: As a fire fighter myself, my job was to put out the fire and go home. I believe now a reason for not seeing a problem of arson or the potential for arson is a lack of knowledge of arson itself. Not only a lack of knowledge among fire fighters, but the public too. Already in these few weeks of school, a whole new light has been shed on even everyday fires. When I went to a typical fire such as a kitchen fire or a car fire when owners are present, usually I felt

sorry for what they had lost. Never realizing some of these people were actually acting out a loss and probably were obtaining a great deal more after the fire....

Fire Chief: I know we have an arson problem. I've seen it, but proving it to others is another thing. The department personnel have had no training in actual arson investigation....

Fire Marshal: I have a big obstacle with my departments arrest and conviction rates for arson because of a lack of cooperation from the district attorney's office....

Retired Fire Marshal: I tried my best but the only training in fire service I had was in fire suppression. I did my utmost on several fires in the past but after reaching a point was unable to proceed by myself, lost interest and retired....

Fire Chief and Fire Marshal: This individual having twenty four years in fire suppression and the last two years being both fire chief and fire marshal, knows how easy it is to simply pass off the cause of any fire to almost anything imaginable. The lack of education, knowledge, decidedness and the failure to request or acknowledge assistance from the talents of higher trained and much more experienced persons, leads me to believe that our arson system has nearly, failed this city....

Policeman: The police department has its priorities, of which arson is on the bottom. The fire departments training is suppression not prevention or investigation and in all small towns a lot of the police departments live by with what the governing body deems important....

Police Chief: I feel that there is a problem. Our officers are not properly trained in investigating fires and it should be done by either the fire department or the district attorneys office....

Furthermore, untrained district attorney personnel are reluctant to accept arson charges because of the false impression conceived by many prosecutors that all of the

evidence is destroyed in the fire. Also, as was stated in The Iceburg Crime:

The prevailing impression is that arson is so difficult to prove...and so hard to pin on any single individual or group of persons...that it simply isn't worth the effort. This attitude is fed by the popular (but inaccurate) view that in arson, all the evidence is usually burnt up. Better to just write it off as another fire of undetermined origin, pay the insurance claim and forget it.<sup>13</sup>

Although the crime of arson is difficult to prove, it is not impossible. A case in point involved a residence that was owned by a former police chief. The house was torched and totally destroyed. Investigation of the fire scene revealed that gasoline and kerosene were used to accelerate the fire. When the facts were presented to the district attorney, the charge of arson was not accepted due to insufficient evidence. However, when the insurance claim representative was informed of the same set of circumstances, the claim was denied, causing the defendant to sue the insurance company in civil court for failure to honor the claim. The court decision sustained the denial based on the fact that there was sufficient evidence to indicate arson.

Currently, the entire State of Texas has no concerted effort to educate the responsible agencies for arson awareness. It is not unusual for patrol officers who are usually the first responding unit to a fire scene, to totally fail to detect any sign of arson or make a report

of the incident. Is it the patrol officer's fault? Not necessarily. Of the two textbooks used in local police academies, (Police Patrol and Police Field Operations) only two paragraphs out of 714 pages of text, address the crime of arson.

Moreover, fire officers are trained for fire suppression, overhaul and salvage operations. All are essential for extinguishing a fire, but they also contribute to evidence contamination. Suppression, by forceful straight streams of water, often destroys or sweeps away evidence. Overhaul operations contribute to distorted fire patterns due to fire officers purposely knocking down ceilings and walls and shoveling piles of debris to fully extinguish the fire. Salvage operations (the main obstacle for fire investigators) most often involve the removing of furniture, appliances and water to the exterior of the structure which inadvertently removes evidence from the scene. In most instances, again due to the lack of training, all of the operations are performed without regard for the preservation of evidence.

Virtually little, if any, education is afforded to fire officers in Texas concerning fire behavior, burn patterns, evidence preservation and arson detection. It is not unusual for ten-to-twenty-year veterans of the fire service to totally disregard or fail to recognize suspicious fire behavior or incendiary fires.

Prosecutors also lack education concerning incendiary fires. Many will not accept cases that are based on circumstantial evidence. Some even think that arson is a matter between the insured and the insurance company and others will not prosecute unless the arsonist was seen striking the match to the gasoline. At last count, Alex Tony Ahart, Executive Secretary, International Association of Arson Investigators (IAAI), reported (telephone interview 8 December 1989) of the total 7,039 members of the IAAI merely six prosecutors from Texas retain memberships.

A number of other states have initiated an arson information management system to maintain files for fire incidents, insurance claims, fire/arson investigations, prosecutions and suspects. Most are maintained by state police or state fire marshals. Also, many states have included arson detection in their major crime tactical squads, which are comprised of state, county, and local agencies. In contrast, the State of Texas has not conformed to the arson detection methods of more progressive states. There is no information center or state-led task force.

Arson is a killer. It destroys lives, families, property and dreams. "The United States is a world leader in fire, arson and fire related injuries and deaths".<sup>14</sup> But the nation is beginning to build a defense against the aggression of incendiary fires. Texas can join the battle by advancing its training and educational standards

and coordinating its arson detection efforts on a state, county and local level.

Currently, state arson investigation certification requires 467 hours of a criminal justice curriculum to obtain a Texas peace officer's license and ninety hours of a mixture of fire science curriculum and police investigative procedures (which in many instances duplicate the criminal justice requirement), from a certified educational facility.

In this author's opinion, the advanced standards that are being realized elsewhere (Seattle, Washington), cannot be attained until the police and fire commissions coordinate their respective curriculums to avoid duplication and the fire science requirements are raised to a minimum of 250 hours. The increased hours could be designated to allow police and fire investigators to work together, in field operations (experimental fire burns) and enhance the skills of functioning as a team, such as the City of Seattle. A program was established in Seattle, in 1975, through the combined efforts of the Mayor's Task Force members, required an intensive 286-hour arson investigation training course which consisted of police, fire and prosecutor personnel.<sup>15</sup> The program was designed to train the combined representatives to conduct detailed arson investigations, prepare cases for trial, and perhaps most importantly, the unlocking of many police, fire and



prosecutor doors which were closed or unknown to the separate agencies in the past.

All fires should be investigated, whether accidental or not. The benefits would be two-fold as the investigator would learn to distinguish the difference between the two and the victim of an accidental fire, who has suffered a great loss, may at least gain knowledge of the cause and origin of the fire.

Also, police officers must be afforded arson investigation training at their respective academies. They must also be encouraged to participate in fire investigation within their jurisdiction without detrimental reactions from supervisory personnel. Police officers should be trained to observe the color of smoke upon their arrival, location and color of the flame, indications of forced entry, vehicles fleeing from the scene and repetitive appearances of an individual at numerous fires. All are essential elements for comprehensive investigations of incendiary fires.

Prerequisites for the certification of arson investigators should be education and training that stresses the seriousness of their role in arson investigation, as well as the motives for the crime. They must be made to understand that arson is a felony crime that is committed by both individuals with high social status, as well as felons. They must be made to comprehend that the apathy of the

public concerning incendiary fires forces them to be the thin line between allowing a serious crime to go unpunished or obtaining a conviction.

Members of both fire and police agencies should be made aware of the fact (numerous test burns by this writer):

- . That a cigarette dropped onto a mattress, causes the mattress to smolder for hours before propagating into open flame and the supposed victim that explains the cause of the fire by stating that, "He fell asleep in bed with a cigarette!" would have succumbed from smoke inhalation, long before the fire fully engulfed the structure;
- . That Thomas Edison is held responsible for numerous fires, in spite of the fact that there was no electric service connected to the structure at the time of the fire;
- . That vehicles with fire in the engine compartment, do not become fully involved with flame within several minutes, as the usually law abiding arsonist would have you believe. That's why fire walls in the engine compartment are called fire walls!

Prosecutors must be willing to educate themselves, by reviewing past court decisions that have sustained arson charges, based on circumstantial evidence. The following

court decisions include some examples:

1. Separate fires: The fact that the fire investigation expert can delineate simultaneous multiple unconnected fires, put together with the elimination of all accidental and natural fire causes, will establish the corpus. (People vs. Saunders (1920) 13 CA 743, 110 P 825), (People vs. Hays (1950) 101 CA 2d 305, 255 P 2d 600).

2. Experiments: In People vs. Freeman (1951) 107 CA 2d 44, 236 P 2d 396, the court allowed the introduction of motion pictures showing investigators conducting an experiment in which they threw lighted matches from a moving vehicle into dry grass to demonstrate that it was possible to cause a fire in that manner (cf. also P. vs. Levine, 85 Cal 30, 22 Pac. 969, 24 Pac. 631).

3. Expert Opinion: In People vs. Holman (1945) 72 CA 2d 75, 164 P d 297, the court admitted the testimony of the fire marshal, who testified that based on burn patterns, the fire was accelerated by the use of some flammable liquid, even though he testified solely on the basis of his expertise and opinion.

4. Opportunity: "While mere evidence of opportunity to commit an arson is not, of itself, sufficient to justify a finding of guilt (People vs. Whitlock, 183 App. Div. 482, 171 N.Y. Supp. 109) it is competent for the prosecution to show that the accused had an opportunity to commit the crime."

5. Possession of Flammable Materials: That a person had, for example, matches and a candle on his possession at the time of his arrest, similar to that used in setting of the fire, can be brought into evidence. (Halleck vs. State, 65 Misc. 147, 26 N.W. 572).

6. Removal of Valuables: "Where the burned building has been in the possession of the accused, the circumstance that immediately preceding the fire he secretly removed items of personal property is relevant evidence. (Patrick vs. State, 18 Ala Ap. 335, 92 So 87)."

7. False Statements: If the defendant can be shown to have lied about a material issue involving the case, that lie may be admitted as evidence. (Pilger vs. Commonwealth, 112 Pa. 220, 5 Atl. 309).<sup>16</sup>

Prosecutors must also be available to assist fire

investigators on the scene. All too often cases are lost due to illegal fire scene searches, improperly submitted evidence and lack of substantial supporting evidence (elimination of accidental causes). The assistance of trained and dedicated prosecutors has proven to be invaluable to this author and it is recommended that they be involved in the preliminary phase of the investigation, as well as the case preparation.

Teamwork is essential for successful arson investigations and the need to eliminate jurisdictional issues and create greater cooperation among agencies has demonstrated its value across the nation. As Linda R. Woodhouse stated: "No one agency or organization has the funds, expertise or energy to combat arson on all fronts, but a coalition of government agencies...can make a difference."

The National Fire Protection Association also endorsed the Task Force concept.<sup>17</sup> It revealed that experience in jurisdictions across the nation indicated that arson investigative units, comprised of fire and police personnel, are logical and workable arrangements.

Finally, this author proposes that the recommended training, education and cooperation among the agencies which are responsible for the detection, investigation and prosecution of arson, will enhance the experience that is essential for a successful arson conviction. As in

any team effort, the experience of working together produces a winning result.

As in arson investigation, no one factor in itself can determine a final disposition, but a combined effort initiated by the State of Texas can and will result in an improved arson detection system throughout the state. Training, education, cooperation, and experience will allow those responsible for the crime of arson to be held accountable for committing one of the deadliest, covert and cowardly acts possible.

## ENDNOTES

1. Carter, Robert E., "Fire and Arson Investigation," in Fire Protection Handbook, 16th ed., ed. A. E. Cote (Quincy: R. R. Donnelley & Sons for The National Fire Protection Association, 1986), p. 15-48.
2. Daniel, Clifton, ed. Chronicle of the 20th Century (Mount Kisco, N. Y.: Chronicle Publications Inc., 1987), 968.
3. Carter, Robert E., "Arson and Arson Investigation in the United States," The Fire and Arson Investigator 31, no. 2 (1980): 55.
4. Anti-Arson Act, Public Law 97 298
5. Stuerwald, John E., "1982 Annual Report of the Insurance Advisory Committee," The Fire and Arson Investigator 33, no. 1 (1982): 40.
6. Michigan v. Tyler, 436 U.S. 499 (1976).
7. Mercilllott, Fred, "University of New Haven Fire Science Program," The Fire and Arson Investigator 31, no. 4 (1981): 63.
8. Stuerwald, John E., ed. "LEAA/USFA Combine to Attack Arson," The Fire and Arson Investigator 29, no. 4 (1979): 25-26.
9. Truex, Thomas H., "The Vermont Approach: A System Born of Compromise and Based on Cooperation," The Fire and Arson Investigator 35, no. 1 (1984): 5.
10. Meehan, John J. and Fry, Philip D., "The Task Force Approach to Fire Investigations," The Fire and Arson Investigator 37, no. 3 (1987): 46-48.
11. State Board of Insurance and State Fire Marshal's Office, Fire in Texas (n.p. 1988), 24
12. Barracato, John S., Burning, ed. M. E. Heffernan (Hartford: Aetna Casualty and Surety Company, 1986), 1.

13. May, Robert, The Iceburg Crime: What police officers should know about arson (Bloomington: State Farm Fire and Casualty Company, n.d.), 3-4.

14. Barracato, John S., Fire...is it arson?, ed. P. S. Keenley (Hartford: Aetna Casualty and Surety Company, 1979), 1.

15. Stuerwald, John E., ed. "Analysis of Arson in a Socio-Economic Framework: Revisited - Conclusion," The Fire and Arson Investigator 31, no. 3 (1981): 24-27.

16. Bates, Robert B., "Making Sense of Nonsense: The 'Negative Corpus' Doctrine in Arson Cases," The Fire and Arson Investigator 38, no. 1 (1987): 27.

17. Carter, "Fire and Arson Investigation," p. 15-48.

## BIBLIOGRAPHY

- Barracato, John S. Burning, ed. M. E. Heffernan. Hartford: AEtna Casualty and Surety Company, 1986.
- Barracato, John S. Fire...is it arson?, ed. P. S. Keenley. Hartford: AEtna Casualty and Surety Company, 1979.
- Carter, Robert E. Fire Protection Handbook, 16th ed. A. E. Cote, ed., The National Fire Protection Association, Quincy: R. R. Donnelley & Sons, 1986.
- Daniel, Clifton, ed. Chronicle of the 20th Century. Mount Kisco, N. Y.: Chonicle Publications Inc., 1987.
- Ettling, Bruce V. The Fire and Arson Investigator, Marlboro: International Association of Arson Investigators, Inc., Vol. 38, no. 1, 1987.
- May, Robert. The Iceburg Crime: What police officers should know about arson. Bloomington: State Farm Fire and Casualty Company, n.d.
- State Board of Insurance, and State Fire Marshal's Office. Fire in Texas. n.p. 1988.
- Stuerwald, John E., ed. The Fire and Arson Investigator. Marlboro: International Association of Arson Investigators, Inc., vol. 29, no. 4, 1979.
- Stuerwald, John E. ed. The Fire and Arson Investigator. Marlboro: International Association of Arson Investigators, Inc., vol. 31, no. 2, 1980.
- Stuerwald, John E., ed. The Fire and Arson Investigator. Marlboro: International Association of Arson Investigators, Inc., vol. 31, no. 4, 1981.
- Stuerwald, John E., ed. The Fire and Arson Investigator. Marlboro: International Association of Arson Investigators, Inc., vol. 33, no. 1, 1982.
- Stuerwald, John E., ed. The Fire and Arson Investigator. Marlboro: International Association of Arson Investigators, Inc., vol. 35, no. 1, 1984.