

Building a Fire (Sciences Team)

An old adage used by fire investigators is that “a fire will tell on itself.” Looking and listening as one might, however, counsel investigating a fire case may find that, unfortunately, the fire will only confide its secrets to the trained ear. The only helpful truth that counsel is likely to discover at the scene is that a credentialed expert, or team of experts in complicated fire cases, will be needed to properly analyze the fire and attendant liability issues.



By Timothy D. Lange

Investigative Options: Where to Begin and What to Do?

So where do you start once you have a fire case? One option is that you can rely upon the fruits of efforts of the applicable governmental authorities investigating the blaze. These official investigations will certainly provide assistance in your quest for information. You may actually have little choice but to rely on their work, if much time has passed between your initial involvement in the case and the fire. However, even for the fortunate lawyer who has a choice, reliance upon the official investigations may prove risky and unwise.

Why Not Rely Upon the Official Investigations?

In some cases, the official fire investigations (you may encounter multiple independent governmental investigations in some scenarios) may support a cause of action for your case. However, fire officials may not always be looking for the same things that you likely will be; they are not necessarily looking to assign legal liability. If the

fire’s cause is determined to be from a failed electrical circuit breaker, fire officials generally do not continue their investigation to prove a case of negligence or design defect upon the part of the installer or manufacturer. Official investigations may be closed once a conclusion is drawn that the blaze did not involve the commission of a crime. While death and serious injury cases are ordinarily thoroughly investigated, other cases may furthermore not get significant attention or documentation.

Time is also an important factor against you. An official investigation may remain open for an extended period of time. Once the official investigators have collected what they believed was pertinent at the fire scene, the file may then sit in limbo. It could be a long wait, in terms of the survival of undocumented evidence that may lie in the ruins of the fire. Awaiting production of a report by the responsible, overburdened official party can therefore result in the loss of evidence. A competing time factor is that safety issues and building code will often require expedited or emergency demolition of a fire damaged structure—which can simultaneously demolish any potential for the success of one’s case.

Is Reliance on Insurance Company’s Investigation Well Placed?

So what can you do beyond waiting for the results of the official investigations? If insurance is involved, there will likely be an independent investigation funded by the insurer who faces a claim. Would it be reasonable then, to leave the fate of your client up to the involved insurance and official investigators? Remember, an insurer is unlikely to disclose much of its investigation to you unless it is legally compelled to do so. This is especially true if it will help your case against its insured, or against it if coverage is an issue. There is also potential for an insurance investigator to unduly influence the official investigation, whether by accident or intention. Maybe the insurance

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investigator will only document or preserve evidence supporting his or her theory of the case? Maybe this is cynical? Regardless, you can eliminate the concern. Your own investigator should be engaged to assist the officials and participate in the collection and sharing of all evidence that is collected.¹ You want an even playing field.² Therefore, you are likely best served by funding your own investigation.

Your Independent Investigation

Once you have decided to hire an expert to help you, you are on the right track, for what may be a long ride. Clues within the fire may be obvious or subtle. Your investigator may see clues everywhere, though all you see is soot. Burn patterns will often show a point of origin, or evidence of the presence of an accelerant. The location of fuel for the fire, such as flammable clothing, draperies or newspaper, may explain how and why the fire spread. You will likely find that the physical structure of a building suffering a major fire has been drastically altered. Debris is often thrown or shoveled out. Walls and floors are opened or destroyed. Appliances melt. Furniture is often unrecognizable—burned to nothing but springs. Furthermore, fires often leave the scene in layers: from roofing material, through ceiling, to

furniture, to carpet, then flooring.³ Welcome to Fire Excavation 101.

Team Building in Your Fire Case

There are fire investigators, arson investigators, chemical engineers, civil engineers, toxicologists and other professionals within a multitude of fields whose expertise may be helpful in the liability component of any given fire case. Mechanical failures, chemical reactions, human elements, and the forces of nature are only a few of the potential causes of fire. Insurance coverage issues can generate disputes as to whether a fire started accidentally or intentionally.

A fire sciences team of experts may be required.

The Cause and Origin Investigation

You will benefit from commencing your investigation with a qualified cause and origin investigator. Once the determination of the point of origin of a fire is made, the cause of the fire will become the focus of the investigation. Every investigator will ask whether the fire was intentionally set or accidentally started. The location of the blaze's fuel may indicate staging and arson. Human factors: motives, actions, and explanations will be explored. Should the cause not be easily determined by the investigator, an accelerant canine detection team might help, as may

chemical analysis of residue. Cause and origin fire analysis is hard science.

Other Experts on Your Team

Your cause and origin expert should be able to recognize his or her limits, and to help you to engage other experts to form a team in your case. A fire scientist may be required to document the particular characteristics of the fire—from the production of toxic gases during the burn, to whether the fire was a smoldering or fast flaming fire. Analysis of the fire may require fire modeling, by computer or through the construction of a fire similar to the one in your case—an expensive proposition.

The mechanism of injury to the plaintiff may be another issue in your case—perhaps the victim in your case did not suffocate from a lack of oxygen, but was poisoned by chemical gases generated from burning building materials or contents? Suddenly your team will require an expert in toxicology and a fire sciences expert who can testify as to the gases produced by the particular materials and contents within the structure. Analysis of the composition of the smoke from a given fire may, again, require fire modeling with laboratory sampling of the gases produced. Whatever the issues may be in your fire case, experts in the realm

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Expert Advice: Building the Fire Sciences Team

of fire sciences should be available to assist.

What Fire Sciences Credentials Exist?

A search of the Internet or other expert witness resources will lead you to literally hundreds of experts looking for work in fire cases. Choose carefully—their credentials vary widely. Many of the potential experts will have served in fire protection and prevention. Some will have federal records of service or training with the Bureau of Alcohol, Tobacco and Firearms (ATF) or the Federal Bureau of Investigation (FBI). The International Association of Arson Investigators (IAAI) and the National Association of Fire Investigators (NAFI) also offer certification and training.⁴ Some experts will have specific local fire protection experience in arson and investigation. Some Universities, including the University of California at Berkeley, offer graduate programs in the fire sciences, as well as extensive laboratory services and modeling capabilities.

As always in your selection of the appropriate expert, be advised to seek references from fellow KATA members or other counsel having previously employed the person under consider-

ation. Request references and background information on any expert with whom you are interested in working. Find out, prior to engagement, whether your potential expert's testimony has been excluded by a successful *Daubert* challenge. Confirm the expert's schedule of fees and document pertinent terms concerning payment and billing before engagement. Conduct as significant a background check as your resources permit. Last, consider requiring a confidentiality agreement from the expert. Remember, your experts can make or break your case. Choose wisely!

- 1 You should be careful to respect the insurer's rights at the scene. Read any applicable insurance policy to which you have access so as not to risk losing coverage. Cooperation and coordination among investigators may be required.
- 2 Bear in mind that safety and legal considerations may restrict your access to vital evidence. You will likely need to act fast to gather and preserve evidence. Conduct your investigation with the consent of investigating authorities, as well as those having authority to grant access to the premises, should your client be unable to do so. Document the authority obtained. If your client is the owner of the premises that burned, you can likely insist on having

your expert present at all times when other investigators are at the scene—bearing in mind that you must respect governmental authority and avoid interfering with the official investigations. You may also otherwise be able to petition for emergency injunctive relief that will ensure your expert fair access during the inspection of the fire scene and the collection of evidence.

- 3 After obtaining the requisite consent and permission to investigate, thorough documentation of the fire scene is required. It will be incumbent upon your investigator to document the scene upon arrival, before any disturbance is made. Fire investigations are generally disruptive. Preserve and document the chain of custody of any evidence that may be removed. Be certain to have consent for such removal if it is required. One of the last things that you will want in your case is an allegation against you or your investigator for spoliation of evidence, unlawful tampering, or trespassing at the scene.
- 4 For excellent links, articles, and references, try the following websites: www.nafi.org—The website of the National Association of Fire Investigators; www.firearson.com—The website of the International Association of Arson Investigators; www.nfpa.org—The website of the National Fire Protection Association; www.atf.treas.gov—The Website for the Bureau of Alcohol, Tobacco and Firearms.

