



SOME THOUGHTS ON A STRATEGY FOR DEFENDING AN ARSON CASE IN WISCONSIN

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To prove the crime of arson in Wisconsin, the prosecution must prove that the defendant “by means of fire, intentionally damages any building of another without the other’s consent”.¹ Attorneys undertaking the defense of an arson case for the first time should approach with caution. At first glance, it may seem that such cases are easily defended as merely based on circumstantial evidence found at the fire scene. However, defense attorneys usually get the case months and sometimes years after the ashes of the fire have cooled and been landfilled. That puts them at a decided disadvantage in that they are stuck with only the evidence collected and preserved by witnesses who may have interests opposed to or indifferent to that of the client’s.

The fire department. The fire chief of a municipality is a statutory fire cause expert for those fires occurring within his or her bailiwick.² They are often right on with their conclusions because they are privy to the observations of ‘first-in’ firefighters who make observations of the fire scene while they are fighting the fire and before the scene is disturbed. However, except in the larger cities, they are not usually trained investigators. It is their job to put out fires.

Adjusters for the fire insurance companies. These are usually very experienced investigators hired and employed by insurance companies. An insured who sets his own house on fire forfeits his insurance coverage. Therefore, there is always an inquiry made into the insured’s financial status in a suspicious fire. In order to be paid, the insured must swear under oath that he did not set the fire in a document called a Sworn Statement in Proof of Loss.³ All policies also give the insurance company the right to take sworn statements under oath of the insureds and question them on the same issues that would be the subject of a criminal complaint. There is no 5th Amendment Right available to refuse to comply. Furthermore, so long as no malice is involved, the insurance company’s investigation can be turned over to prosecutors on demand - and vice versa.⁴ It is the adjuster’s job to pay claims covered under the policy - no more, no less.

The Fire Marshall. Most defense counsel don’t realize it but arson investigation is a function of the Department of Justice.⁵ Fire Marshalls are DOJ employees.⁶ They come up the ranks as criminal investigators. However, though they get a lot of formal training in fire causation, most have no

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experience as firefighters. They are formidable because they know how to take statements and prepare a criminal case. They can enter fire scenes when they have probable cause and a warrant.⁷ They also have the power to call quasi-judicial inquests.⁸ It is their job to get the accused convicted.

Because all these investigators are potential expert witnesses, it is vital that the defense obtain copies of all their files. While the prosecution's file may contain no exculpatory evidence, the insurance company's or fire chief's file may. For example, the insurance company may have paid the claim or the fire department may have determined that the fire was accidental. Those decisions and opinions would have to have had some bases in fact that were either ignored, dismissed or not considered by the prosecution's experts. Otherwise, charges would not have been filed. They may be even more probative of the defendant's innocence than the prosecution's is of the defendant's guilt.

For years, fire investigation was the domain of fire chiefs, fire marshalls and insurance adjusters. Proof of arson was by means of locating evidence of "the fire triangle", i.e., "set fire, motive and opportunity", though not necessarily in that order. Those investigators promulgated many theories of fire causation based on their experiences and observations. Forensic science, it was not. Scientists and engineers involved in fire investigations became very critical of theories which were not supported by scientific testing and validation. Random match probability, double blind and other statistical scientific techniques are used to validate most scientific test methods such as DNA testing.⁹ Then, after the U.S. Supreme Court's 1993 decision in *Daubert v. Merrill Dow*,¹⁰ the National Fire Protection Association (NFPA) sought to bring scientific validity to fire investigation by promulgating "NFPA 921 Guide for Fire and Explosion Investigations". NFPA 921 is a standard establishing a systematic *Daubert*-style scientific approach and methodology for conducting an investigation of a fire scene.

NFPA 921 did away with many of the unproven rules of thumb that fire investigators had been relying on for years. It provided a scientific procedure for conducting the investigation.¹¹ In doing so, it sought to restrict the conclusions of fire investigators based on those principles accepted in the scientific community. NFPA as a standards organization is so well recognized in the fire prevention and protection field that most prosecution experts will swear by NFPA 921 as their bible or else risk their jobs. The defense should require them to do so because it is the most powerful tool for cross examination available. Every attorney defending an arson case should have a copy of NFPA 921 to introduce as an exhibit. Copies are available from the NFPA.¹²

Strict adherence to the scientific method under *Daubert* has been the rule in the federal system since 1993. In the Eleventh Circuit Court of Appeals, the federal court in the civil arson case of *Michigan Millers Insurance v. Benefield* applied *Daubert* in upholding the exclusion of the testimony of a defense expert for not following NFPA 921.¹³ In the 2004 civil non-arson fire case of *Truck Insurance Exchange v. Magnetek, Inc.*, the Tenth Circuit Court of Appeals affirmed a trial court's decision to throw out expert opinions which were based on the long-standing theory of pyrolysis (that a material, under certain conditions, can self-ignite at a temperature below a material's established ignition temperature). The defense had introduced conflicting studies to argue that the theory was not sufficiently reliable.¹⁴

Some state courts are becoming aware of the lack of acceptance of certain fire causation theories and have dismissed cases in which fire experts have relied on them. Michigan has the same statutory rule for admissibility of expert testimony as Wisconsin.¹⁵ In the civil arson case of *Ronald Taepke v. Lake States Insurance Company*, the Circuit Court applied the *Daubert* rule and entered an order on December 8, 1999 excluding the opinion of the insurance company's expert because it did not conform to NFPA 921. The case was not appealed.¹⁶ Many states have adopted *Daubert*.¹⁷ Wisconsin has not.¹⁸

In Wisconsin, the state courts are given broad discretion to admit expert opinions, i.e., “[i]f scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise”.¹⁹ Scientific evidence is admissible if: (1) it is relevant, s. 904.01, Stats.; (2) the witness is qualified as an expert, s. 907.02, Stats.; and (3) the evidence will assist the trier of fact in determining an issue of fact, s. 907.02, Stats. Reliability is not a prerequisite for admissibility.²⁰

There is pressure in the Wisconsin legislature to adopt some form of *Daubert*. Senate Bill 49, a *Daubert*-style bill, was introduced in the Wisconsin Senate in 2004. It required the scientific method of *Daubert* be adopted in state civil court proceedings. Criminal cases were exempt. However, the bill was vetoed by the governor.

Therefore, the defense in an arson case in Wisconsin is limited severely on the ability to discredit prosecution witnesses who testify based on their “experience and training” rather than the scientific protocol of NFPA 921. Nevertheless, most of these experts belong to NFPA and swear by NFPA 921 as their bible. Therefore, prosecution expert witnesses should be queried at length at the preliminary hearing as to whether they followed NFPA 921 in arriving at their conclusions and that in their opinion, not to do so, (1) would not be something a qualified expert in fire investigation would do nor (2) would an opinion from such an expert be relevant or (3) assist a trier of fact in an arson investigation in finding the truth.²¹ A negative response on any one of those elements may exclude such an expert’s opinion that did not conform to NFPA 921. In preparation for trial, prosecution experts’ files should be scrutinized to find instances where the standard was not followed. If instances are found, pre-trial motions should be brought to exclude their testimony as in *Benefield* or *Taepke*.

The following sections of NFPA Standard 921 (2001 edition) are some typical broad areas of inquiry:

1.3.45 This is the scientific definition of “fire”. Every investigator should know it by heart.

2.2 recommends the “scientific method” for fire investigation. Any deviation from it would be contrary to the standard. An arson expert who admits to basing his opinion on his “experience” rather than a “scientific method” should be examined on his reasons for rejecting the scientific approach.

2.3.1 recommends that the first step in any investigation is to determine cause.

2.3.4 mandates the use of inductive reasoning to analyze only objective facts. This was not followed by the expert in *Taepke*.

2.3.5 requires the investigator to develop a theory of fire cause based only on objective facts.

2.3.6 requires the theory to be tested by comparing it to all known facts, both objective and subjective. A finding of “undetermined” is recommended for theories of fire cause that don’t meet the test.

3.1 urges the investigator to use all available technical literature to interpret the evidence. This gives investigators free rein to go outside the standard for bases for their conclusions. Following this rule, the *Truck Insurance Exchange* court rejected even the NFPA guidelines where recent fire literature showed that there was disagreement among scientists over the validity of pyrolysis as a causation theory.²²

15.1 is the accepted procedure to determine the origin of a fire.

16.2.5 cautions the investigator that the method whereby one determines that a fire was set by a process of “elimination of all accidental causes” can rarely be justified scientifically. This was the federal court’s basis for rejecting the arson expert’s opinion in *Benefield*.

19.4.8 cautions that motive and opportunity are separate inquiries to be made **ONLY AFTER** the initial inquiry into whether the fire was a set one. Motive is not intent but points to those who are suspects, i.e., they had a reason to set the fire.²³ Motive indicators are not to be used in the first inquiry. This was the Michigan court’s primary basis for rejecting the arson expert’s opinion in *Taepke*.

Prosecution witnesses’ files should be studied to determine whether they began an investigation into suspects’ motives before they arrived at a determination of the fire’s cause. A prosecution’s expert may have worked backwards from motive to cause, i.e., he may have found a suspect with a list of priors with motive and opportunity before he solidified his conclusion that the fire was a set one.

Those elements are usually all tried together. However, a defendant may have severe financial setbacks that would give him a strong motive to set the fire. Nevertheless, the prosecution may embellish that motive indicator to overcome weak evidence of a set fire leading to a wrongful conviction. This is particularly effective when the defendant has a list of priors. Prosecutors are well aware that defense counsel will advise their client against taking the stand in such an instance, leaving the prosecution’s proof unchallenged. A motion should be made in **EVERY ARSON CASE** under this NFPA section that the trial be bifurcated into 2 stages, i.e., one on whether the fire was incendiary and, if so, then whether the defendant did it intentionally. In that way, any motive indicators the prosecution may wish to bolster its case over weak causation evidence cannot be introduced into the original phase. If the prosecution then fails on the incendiary stage, the case ends.

NFPA 921 is also very detailed so as to discredit many old rules of thumb relied on in the past. For example:

4.16.4.1 cautions the investigator not to assume the lowest burn pattern identifies absolutely the point of origin of a fire.

4.17.7.2 advises the investigator to consider the possibility that burning debris that has fallen to a lower level may be a cause of a low burn pattern.

6.9.6 advises the investigator of the unlikelihood of a high resistive fault to be found after a fire though they can be a cause of a fire.

6.12.5.2 cautions the investigator not to rely on the appearance of an electrical conductor to determine whether it was properly grounded but requires that specific testing be done to confirm grounding conditions.

14.5.3.4 advises the investigator to take comparison samples of surrounding material for testing to eliminate volatile products from the material from any accelerants that may have been used to cause the fire.

14.10.2.1 advises of the only accepted test methods of gas chromatography that adequately characterize petroleum distillate accelerants.

14.10.2.2 lists the accepted test method of mass spectrometry.

Note that the above citations are all to civil cases defended by insurance companies. The damages are fixed

(property loss only) leaving no risk of excessive exposure if tried or appealed. Like prosecutors, insurance defense counsel have nearly unlimited resources to hire experts. Criminal defense lawyers in arson cases rarely have such luxury. Therefore, I would urge criminal defense lawyers to research the citations to civil arson and fire subrogation cases. An unwitting ally, fire insurance companies have the wherewithal to hire experts to raise successful NFPA 921 challenges to their opponents' claims. Those citations can provide invaluable assistance not only in cross examination of the methodology and theory of the state's experts but in any appeal brought over a trial court's failure to grant relief.

Another inquiry to be made on file review is whether the prosecution's experts are relying on witnesses other than the police. Insurance adjusters are interested in an arson charge, especially when the insured himself is a suspect. A conviction voids policy coverage. Therefore, one should review the files to see whether a statutory demand was made by the prosecution for the insurance company's file, and, specifically, whether a sworn examination of the insured was demanded by the insurance company. Such an examination, if requested be done by the police, raises a Fifth Amendment question that the insured was being forced to be a witness against himself in order to make a claim under his policy. The same question can be raised if statements of the insured in making a claim under his policy are used by the prosecution to form a basis for the criminal charge. It would be a surprise to find a paper trail of contacts in the files between the police and the insurance company urging the insurance company to obtain evidence that the police could not otherwise obtain. However, it's always worth an argument to suggest that it happened if the demands to the insureds are coincidentally and chronologically linked to calls from the police or fire marshal's office. A motion to suppress the statements would be appropriate if the link actually is made.

The defense should be cautious about conducting an independent investigation of the fire scene or debris. By the time the defense gets to the scene, things have been changed or handled so much that it may be too late to conduct an investigation with reliable conclusions. Indeed, it may make matters worse for the defense since any inspection, if relied upon by defense experts, can be used to impeach them if the prosecution can show the scene had been changed. Indeed, defense experts may be detrimental to the case because of the limited testimony they can offer. Instead, defense counsel are urged to explore the basis for any conflicting fire causation theories posed by the fire department or insurance companies. Fire departments and insurance investigators are more apt to conduct their investigations following NFPA 921 since they are more concerned with preventing fire and limiting losses. Fire marshals conduct their investigations in anticipation of criminal litigation. The fire marshal may have overlooked or ignored key facts found by the fire department or insurance companies that conflict with the prosecution's theory.

Then there's the issue of reports. Many attorneys ask their experts to prepare short reports to force them to define the key facts and science to support the conclusions they will give at trial.²⁴ However, there is no requirement to prepare a report. The prosecution's file may just be an accumulation of raw data that will come together in an oral opinion from the witness stand. Therefore, to avoid surprises, I recommend that the defense bring a motion in limine asking the court to order the prosecution's experts to submit written reports of facts, scientific basis and conclusions that they will be limited to at trial.

At trial, the prosecution may ask for an order to sequester the defense witnesses. If the defense does not ask for reciprocity, the prosecution's expert will be able to advise the DA during cross examination of defense witnesses. So defense counsel should ask that the prosecution witnesses be sequestered as well. Voir dire of the prosecution witnesses should be conducted and motions made as above and instructions requested appropriate to the facts necessary to support those motions.

Courts adopting *Daubert* and NFPA 921 as the standard for arson trials will move a giant leap towards ensuring that the purpose of such a trial is to find the truth, not adversarial entertainment for the jury. Until

then, the truth will belong to the best salesmen (and strategists) in the courtroom.

Endnotes

1. Sec. 943.02(1)(a), Stats.
2. Sec. 165.55(1), Stats.
3. Sec. 628.46(2), Stats.
4. Sec. 165.55(14), Stats.
5. Sec. 165.50(1)(b), Stats.
6. Sec. 165.51, Stats.
7. Sec. 165.55(2), Stats. and the requirement of a warrant. *Michigan v. Clifford*, 464 U.S. 287 (1984).
8. Sec. 165.55(3), Stats.
9. Beland, B., "Considerations on Arcing as a Fire Cause", *Fire Technology*, Vol. 18 No. 2, (1982), pp. 188-202, 200. Mnookin, Jennifer L., "The Achilles Heel of Fingerprints", *The Washington Post*, Saturday, May 29, 2004, p. A27.
10. *Daubert v. Merrill Dow*, 509 U.S. 579 (1993).
11. Sec. 1.2, NFPA 921
12. NFPA, 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101.
13. *Michigan Mutual Ins. Corp. v. Benefield*, 140 F.3d 1915 (11th Cir., 1998).
14. *Truck Insurance Exchange v. Magnetek, Inc.*, No. 03-1026, Feb. 25, 2004.
15. Michigan Rules of Evidence MRE 702.
16. *Ronald Taepke v. Lake States Insurance Company*, File No. 98-1946-18-CK, Charlevoix County Circuit Court (1998). <http://www.fireandsafety.eku.edu/FACULTY/RHOP/FSE450/michigancourt.pdf>
17. Ries, David G., 22 Energy and Min.L.Inst. ch. 13 (2002) http://www.emlf.org/Ries_02.pdf
18. Huron Consulting Group, "States That Follow Daubert" (2004) http://www.huronconsultinggroup.com/uploadedFiles/daubert_states4.pdf
19. Sec. 907.02, Stats.
20. *State v. Krogman*, 224 Wis.2d 645 (1999).
21. *State v. Krogman*, Ibid.
22. Pyrolysis rejected in *Truck Ins. Exchange v. Magnetek, Inc.*, 10th Circuit Court of Appeals (2/2004).
23. Sec. 19.4.8.1 NFPA 921.
24. Verhaagh, Dennis J., "Will Wisconsin Adopt the Daubert Rule", *Wisconsin Defender*, Winter 2000, 8:1, pp. 6-13. <http://www.wisspd.org/html/publications/docs/wdefwinter00.pdf> ■