

The Standard of Care in Fire Investigation

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When NFPA 921, *Guide for Fire and Explosion Investigations*, was first published in 1992, there was a great uproar in the fire investigation community. For years after its introduction, NFPA 921 remained a controversial document, and was particularly detested by individuals who believed that 921 “took away their tools.” No longer was it considered valid to declare a fire incendiary on the basis that it had burned “hotter than normal,” because the document correctly pointed out that a well-ventilated gasoline fire burned no “hotter” than a well-ventilated wood fire. Further, the document dealt with “misconceptions” widely held in the fire investigation community. Nearly all of these misconceptions were related to the misinterpretation of post-fire artifacts such as crazed glass, melted bed springs, and spalled concrete as evidence of arson. Individuals who had obtained convictions or ruled fires incendiary based on these indicators were understandably troubled, and they made their displeasure known.

The most important result of the publication was not, however, the debunking of the mythology of arson investigation; it was the statement that fire investigation should be conducted according to the scientific method. Even that common sense idea was resisted strongly for a number of years. As late as 1997, people who claimed to represent the fire investigation profession were arguing that fire investigation was a “less scientific” discipline than other kinds of forensic investigations, and that investigators should be allowed to present conclusions based on “traditional” investigative methods.

In the case of *Kumho v Carmichael*¹, the US Supreme Court turned this argument on its head, and ruled unanimously that “less scientific” expert testimony should be subjected to **more** rigorous scrutiny, not less. That ruling essentially brought an end to the objections of the proponents of “traditional” fire investigative methods.

In the years since the *Kumho* decision, NFPA 921 has gained widespread acceptance in the fire investigation community, to the point where most responsible investigators now consider NFPA 921 to be a standard of care. The National Association of Fire Investigators (NAFI) has adopted each successive edition of NFPA 921 as *the* standard of care in fire investigation. Many insurance companies, which fund the private sector fire investigation industry, insist that investigators pledge to follow NFPA 921 before they will be hired.

In 2000, the U. S. Department of Justice issued a research report entitled *Fire and Arson Scene Evidence: A Guide for Public Safety Personnel*, which contains the following statements about NFPA 921:

In 1992, the National Fire Protection Association (NFPA) issued *NFPA 921: Guide for Fire and Explosion Investigations*, a consensus document reflecting the knowledge and experience of fire, engineering, legal, and investigative experts across the United States. This document is continuously reviewed, public proposals and comments are solicited, and a

revised edition is produced every 3 to 5 years. It has become a benchmark for the training and expertise of everyone who purports to be an expert in the origin and cause determination of fires.

The investigator should recognize the limitations of his or her own expertise and determine what personnel may be required to process the scene according to *NFPA 921* and other recognized national guidelines.

If neither the origin nor the cause is immediately obvious, or if there is clear evidence of an incendiary cause, the investigator should conduct a scene examination in accordance with *NFPA 921* and other recognized national guideline or seek someone with the expertise required.

Most importantly, the **courts** in the United States have now embraced NFPA 921 as the standard of care in several major cases, and a **body of law** has formed around these cases. There are still some investigators who will not acknowledge NFPA 921 as a standard of care, sometimes in an attempt to avoid being cross-examined from it, but the cases cited below have relied on the guidance of 921. Sometimes, an investigator's testimony is excluded if they have not followed the scientific method, and in other cases, investigators' testimony is specifically allowed if it can be shown that they have followed the scientific method and NFPA 921. There are many more cases than the eleven cited below, but these should give the reader an adequate sense of where the courts are going in the United States.¹

Travelers Property & Casualty Corp. v G.E.² (July 26, 2001)

This is one of the earliest cases discussing NFPA 921 as the standard of care. Defendant G.E. moved to exclude the testimony of Travelers' expert, John Machnicki, who was offering opinion testimony on the design of G.E. dryers that had resulted in twenty-three fires, for which the Travelers had paid their insureds substantial sums of money. Machnicki's report was only three pages long, yet G.E. deposed him for twelve days between September 13, 1999 and June 14, 2000. The Court held a *Daubert*³ hearing on July 16, 2001, and denied G.E.'s motion to exclude Machnicki's testimony. The standard used by the Court was NFPA 921. In the *Daubert* hearing, Machnicki had apparently come to the realization that NFPA 921 was a valuable document, something that he apparently did not express clearly in his twelve-day deposition. In the Court's Opinion, the following language appears:

Although Machnicki clearly had a different view of the authoritativeness of the National Fire Protection Association 921 *Guide for Fire and Explosion Investigations* ("NFPA 921") during his deposition than he did

¹ All of the opinions cited in this paper were collected from the website Dauberttracker.com. The dates in parentheses are the dates the opinions were handed down. The factual background cited was lifted straight out of the court's opinions. To the extent that the factual background is incomplete or incorrect, the author assumes no responsibility. Some of these cases contain instructive language on subjects other than the standard of care, and those will be pointed out.

at the July 16, 2001 hearing, the Court is convinced that the steps Machnicki took to develop his opinions were nevertheless **consistent** with the principles of NFPA 921, a peer-reviewed and generally accepted standard in the fire investigation community.

Other parts of the Court's ruling are instructive. G.E. objected to the fact that Machnicki had not actually tested his theory experimentally, but the Court noted that his theory was **capable** of being tested, so that G.E.'s experts could employ testing to undercut it, and, indeed, have engaged in such efforts. The failure to conduct experimental tests is often part of a **Daubert** challenge to expert testimony, but in this frequently cited opinion, the Court went back to the original language of **Daubert** and focused on the **capability** of a theory to be tested, rather than on whether or not such testing had actually taken place.

Further, the Court explained the necessity of clear communication in reports and depositions. They stated:

In short, Machnicki's testimony at the **Daubert** hearing convinced the Court that he did follow the scientific method and a reliable methodology, but, for whatever reason, did an exceptionally poor job articulating that methodology in either his expert report or in his deposition.

Travelers was sanctioned (made to pay a fine to the other party) by the Court for the sparse expert report and for the fact that it took twelve days of testimony for counsel for G.E. to understand Machnicki's opinion, but the Court held that the appropriate remedy for Travelers' "bad faith" was the imposition of sanctions and not the exclusion of Machnicki's testimony.

Four of the other nine cases cited in this article reference the Court's Opinion in the Travelers case.

Chester Valley Coachworks v Fisher Price, Inc.⁴ (August 29, 2001)

This was a product liability action resulting from a July 16, 1998 fire started at the plaintiff's place of business, Chester Valley Coachworks (CVCW) in Spring City, Pennsylvania. CVCW was in the business of restoring automobiles as well as doing conversions of monster trucks and motor homes. Another business, KSR Motor Sports, operated out of the same facility. The owner of the second business purchased two "Big Foot" model Power Wheels products, designed and distributed by defendant Fisher Price, Inc. Plaintiffs contend that one of the Big Foot devices caused the fire when it spontaneously ignited due to a design defect in its electrical system.

Defendant Fisher Price moved to exclude the testimony of the Plaintiffs' origin and causation expert, Paul M. Kaczmarczik, and a **Daubert** hearing was held. The purpose of the **Daubert** hearing was not to determine whether Kaczmarczik was correct in his assertion, but to determine whether his methodology was reliable. The Court used NFPA 921 as the standard by which the reliability would be judged. First, the Court noted that

Kaczmarczik's first reference to NFPA 921 came only **after** preparing his report, **after** his deposition, and **after** the filing of the motion to exclude his testimony. In its opinion, the Court stated:

Kaczmarczik acknowledges that NFPA 921 is *the authoritative comprehensive guide* to accepted procedures and techniques of fire investigation.

The Court then goes on to describe and quote the basic methodology section of NFPA 921 (at the time, it was Chapter 2; it is now Chapter 4), and stated:

If Kaczmarczik had followed the universally recognized standard methodology in arriving at his origin and cause conclusion, we would have little trouble admitting his testimony. However, Kaczmarczik's testimony demonstrates that far from following this methodology, Kaczmarczik deviated from it repeatedly and significantly.

In a detailed analysis of Kaczmarczik's testimony, the Court stated:

“Kaczmarczik admitted at the *Daubert* hearing that he approached his investigation of the fire's origin with the hypothesis that Big Foot #2 could have caused the fire. It is exactly this type of “putting the cart before the horse” that NFPA 921 forbids...It is not difficult to understand the wisdom of this required methodology. An investigator who goes into a fire investigation with preconceived notions of what he expects to find is more likely to find it than an investigator who goes in with an open mind. Indeed, the evidence in this record suggests that all of the independent investigators investigated the origin of the fire before looking for causes within that origin. Only Kaczmarczik, who had a preconceived notion of what the cause might be, located the fire's origin in the northern part of the building where the Big Foot vehicles had been.” (Defendant G.E. had employed four other fire investigators, who all opined that the fire had a different origin than that hypothesized by Kaczmarczik.)

The Court also hammered on Kaczmarczik failing to investigate the fire scene before it was cleaned up. The Court went on to point out numerous observations that Mr. Kaczmarczik had failed to make because he failed to conduct a site inspection. He also failed to interview eyewitnesses to the fire or even to review the available deposition transcripts of two eyewitnesses to the fire. The Court stated:

It is clear to us that the methodologies Kaczmarczik used in his fire investigation deviate frequently and significantly from those of the Basic Methodology chapter of NFPA 921, the authoritative guide for fire investigations. These deviations have left us with serious doubts as to the reliability of the methodologies that Kaczmarczik did follow and the

conclusion that he reached, however, as hereinafter demonstrated, we need not rely solely on these deviations to exclude Kaczmarczik's testimony.

The Court then went on for several more pages, criticizing both Kaczmarczik's methodologies and conclusions, and ruled that he would not be allowed to testify. Given that he was the Plaintiffs' only expert, summary judgment was granted to the Defendant Fisher Price.

Snodgrass v Ford Motor Company⁵ (March 28, 2002)

This was a multiple party action against Ford Motor Company for fires caused by speed control disconnect switches. The Plaintiffs' expert, William Haggerty, was excluded in an August 31, 2001, ruling by the Court, because he had not yet reached his conclusion to a reasonable degree of certainty, and the deadline for reports had passed. By March 28, 2002, Mr. Haggerty had examined six burned vehicles and had reviewed documents from six more. Defendant Ford Motor Company challenged Mr. Haggerty's ability to testify about the six fires for which he had only documentary evidence because he had failed to follow NFPA 921. In this case, there did not seem to be an issue as to whether NFPA 921 constituted the standard. All of the Court's discussion was about whether Mr. Haggerty had followed this standard. The Court's opinion included an extensive discussion about the change between the 1998 and 2001 editions of NFPA 921 regarding the necessity to actually inspect the fire scene, rather than inspecting documents and photographs produced by others. The fact is that the six additional vehicles were simply not available for Mr. Haggerty to inspect. The Court found that he could testify, based on his experience as a vehicle fire investigator and based on his review of all of the photographs and deposition transcripts and other documents available in the six cases in which the vehicles, themselves, were unavailable. The Court found that Mr. Haggerty's use of documents and photographs did, in fact, comply with the requirements of NFPA 921.

There was further discussion about a (since-deleted) section of NFPA 921, which described different types of interviews. The categories of persons to be interviewed were delineated as "those you can approach with an attitude of trust," "those you must approach with caution," and "those you must approach with an attitude of distrust." Ford maintained that all of the plaintiffs should be placed in the third category, because they had an obvious interest the outcome of the investigation. The Court held that the passages in NFPA 921 were specifically designed for arson investigations and not for product liability investigations.

Royal Insurance Company of America v Joseph Daniel Construction⁶ (July 10, 2002)

This ruling occurred in the context of a subrogation action filed by Royal Insurance Company on behalf of their policyholders, Patrick and Linda McGee, to whom they paid \$564,000 following a December 15, 1998 fire. There had been approximately a twelve-hour delay between the time welders, who were working in the McGee garage, left and

when a fire was detected. Plaintiffs' insurance carrier hired Patrick McGinley Associates approximately one year after the fire, and McGinley opined that the fire was the result of welders cutting a beam in the garage and violating NFPA 241 (*Standard for Safeguarding Construction, Alteration and Demolition Operations*) and NFPA 51B (*Standard for Fire Prevention During Welding, Cutting, and Other Hot Work*).

Defendants moved to exclude McGinley's testimony, but the Court found McGinley to be qualified and his methodology to be reliable. The Court stated that McGinley's investigation was:

conducted in accordance with the professional standards and scientific methodology used by experts in fire and explosion investigations, and set forth in the National Fire Protection Association's *Guide for Fire and Explosion Investigations* (NFPA 921).

The Court also cited another ruling in the *Travelers v G.E.* case, discussed above; where another court held that NFPA 921 was "a peer reviewed and generally accepted standard in the fire investigation community." The Court ruled:

A comparison of McGinley's methodology with the six steps of the NFPA 921 methodology reveals that his conclusions were based on the recognized standards and not merely his subjective beliefs...therefore, McGinley's testimony satisfies the standard of reliability under *Daubert* and Federal Rules of Evidence 702.

State of Utah v Troy Lynn Schultz⁷ (November 17, 2002)

This was a criminal arson case, wherein Mr. Troy Lynn Schultz was convicted of setting fire to a van owned by Ms. Teresa Villegas on August 6, 2000. Schultz was identified by an eyewitness as being seen throwing a rag or a white napkin into the van. After the fire, Jeffrey Long², a Certified Fire Investigator, investigated and determined that the fire had been intentionally set, but his samples from the laboratory came back negative. Mr. Long gave testimony concerning an accelerant detection canine that had been brought to the scene, and Defendant Schultz objected to Mr. Long's being allowed to testify.

The Court cited the language on the appropriate use of accelerant detection canines from NFPA 921, and also cited other sections of NFPA 921, which Mr. Long stated he had followed. The Court engaged in a substantial analysis of NFPA 921's cautionary language on canines and concluded that the admission of the testimony of the dog handler that the canine had alerted was an error, but a "harmless" one, because Mr. Long's determination that the fire was arson was not reached on the basis of the canine's alert. Mr. Long testified that he had followed NFPA 921 and the Court stated:

The 921 is regularly relied upon by fire investigators, as evidenced by Mr. Long's testimony that all new fire investigators are tested from the

² Mr. Long is a long serving member of NFPA's Technical Committee on Fire Investigations.

guide....Therefore, Mr. Long could rely on the 921...to support his testimony.

Of all of the cases cited herein, this is the only criminal case. Judges are historically reluctant to exclude any of the State's evidence, and they did not do so here, but in admitting the State's evidence, they implicitly recognized the authority of NFPA 921.

McCoy v Whirlpool⁸ (April 16, 2003)

This case arose out of a fatal fire that occurred at the James and Lorrain McCoy residence in Kansas on February 16, 2000. The case made several trips to court, as both sides challenged the qualifications and reliability of the other side's experts. The Court held that because all of the experts had followed NFPA 921 methodology, they would all be allowed to testify, and that issues of reliability could be taken up at the time of trial. So a *Daubert* hearing was not even held. In its memorandum on Plaintiffs' motion to exclude the testimony of Richard "Smoky" Dyer³, the Court stated:

Dyer's methodology does not involve new scientific theory or new and novel testing methodologies. The 'gold standard' for fire investigations is codified in NFPA 921, and its testing methodologies are well known in the fire investigation community and familiar to the Court.

When the case came to trial, the jury returned a verdict in favor of the McCoy's in the amount of \$1.7 million, but the Court granted Whirlpool's motion for a directed verdict, and *reversed itself* on the admission of the testimony of one of the Plaintiffs' electrical engineers, James Martin. The Court had initially held that Mr. Martin would be allowed to testify, even though he could not specify which of ten possible locations of resistive heating in the Whirlpool dishwasher had caused the fire. The Court ruled that had it not granted the directed verdict, it would have granted a new trial, because the Court abused its discretion in admitting Martin's testimony. (The "abuse of discretion" review standard is a very stringent one, and a judge ruling that he had abused his own discretion is certainly a rarity.) The Court stated:

On further reflection, the Court finds that Martin did not adequately explain under what scientific principles he concluded that a product defect created excessive resistance heating which caused the McCoy fire....The Court also should have excluded Martin's testimony at trial because Martin did not explain how the two specific alleged defects caused excessive heating, which in turn caused the fire. He therefore did not apply his theories to the particular facts of this case.

This is again an unusual turn of events; one that would have been avoided had the Court held the *Daubert* hearing and elicited Martin's proffered testimony prior to the trial. The McCoy case is frequently cited by other courts in *Daubert* hearings because of its use of the term "gold standard."

³ Chief Dyer is a long serving member of NFPA's Technical Committee on Fire Investigations.

Tunnell v Ford Motor Company⁹ (June 28, 2004)

This was a case arising out of a fire that occurred after Mr. Tunnell crashed his Mustang GT into a utility pole. He suffered a broken leg and some burns, and complained that the Mustang should have been equipped with a “battery cut-off switch” to prevent the post-collision fire. There were numerous experts involved in this case, three of whom claimed expertise in fire origin and cause determination. Ford moved to exclude all three of these individuals, and in each case, the Court held that the fact that they followed the methodology of NFPA 921 allowed their testimony to be admitted. The first expert, Charles Crim, examined the car and its wiring. Ford objected to Crim’s testimony because he was not an electrical engineer, to which the Court replied, “Ford’s objections to Crim’s testimony are meritless.” Commenting on Ford’s claim that Crim’s opinion should not be admitted because he did no testing, the Court stated:

Daubert does not require an expert to perform testing before his opinion is admissible. Rather, *Daubert* requires the expert’s methodology be established, scientifically sound, and subject to testing and peer review. That is clearly the case with Crim’s opinion, as he testified that he employed the fire origin methodology spelled out in the definitive fire origin standard published by the National Fire Protection Association....Throughout his deposition testimony, Crim described his methodology in determining the origin of the fire as following the guidelines of NFPA 921. Many courts have recognized NFPA 921 as ‘a peer reviewed and generally accepted standard in the fire investigation community.’

The Court went on to state:

Crim’s testimony was based on his investigation of the cause of the fire, an investigation which was conducted in accordance with the professional standards and scientific methodology used by experts in fire and explosion investigations and set forth in NFPA 921. A comparison of Crim’s methodology and the NFPA 921 methodology reveals that his conclusions were based on these recognized standards and not merely his subjective belief.... Therefore, Crim’s testimony satisfies the standard of reliability under *Daubert* and Federal Rules of Evidence 702.

In a similar analysis on the admissibility of the testimony of electrical engineer Samuel McKnight, the Court stated:

The problem with Ford’s complaints in large measure is that they ignore the fact that the NFPA 921 methodology was employed by McKnight and has been determined to be a reliable methodology for determining fire origin.

The Court then quoted extensively from several chapters in NFPA 921, including the chapters on Basic Methodology, Cause Determination, and Vehicle Fires.

With respect to the testimony of Jerry Wallingford, a mechanical engineer, the Court held that he could render some, but not all of the opinions that he proffered, but with respect his origin and cause opinion, the Court held:

He has had training on NFPA 921 and has performed fire origin and cause investigations. Like Crim and McKnight, he applied the well-established NFPA 921 methodology and appropriately applied it to the facts of the case.

Indiana Insurance Company v G.E.¹⁰ (July 16, 2004)

This case arose out of a March 26, 2000, fire at the residence of Robert and Paula Fleming, in Willshire, Ohio. Subsequent to the fire, the Flemings filed a claim with Indiana Insurance Company, which paid them \$88,815.00 on their claim. Indiana retained experts Steven Claytor and Bernard Doran to investigate the incident. As a result of their investigation, Claytor and Doran concluded that the fire originated in a G.E. refrigerator located in the basement. Indiana then sued G.E. in a subrogation action in Hamilton County, Ohio, seeking to recover the amount they paid to the Flemings. G.E. removed the case to Federal court, and then moved to exclude the testimony of the plaintiffs' experts and to dispose of the case on summary judgment.

G.E. made the argument that neither Claytor nor Doran was qualified under Rule 702 to opine about the origin and cause of the fire, because they had never designed a refrigerator. The Court correctly threw out this bogus argument. (The author's qualifications have been challenged on several occasions by manufacturers making a similar argument. The courts have always seen through this illogical contention.)

G.E. also moved that Claytor be excluded because of his failure to follow NFPA 921, specifically the section on evidence collection and documentation. It seems that during his investigation, Mr. Claytor became confused about the provenance of a power cord that he believed to be from the refrigerator. In his deposition, Claytor testified that the power cord was lying on top of the trash compactor next to the stove, and was not attached to the refrigerator, and his effort at matching the power cord to the refrigerator consisted of simply examining the cord, holding it, and determining that it was the only cord in the area that was burned. However, Claytor could not identify the electrical receptacle into which the refrigerator was plugged, and that was persuasive to the Court. The Court's opinion excluding his testimony reads as follows:

His confusion regarding the power cord and the receptacle illustrates Claytor's failure to follow NFPA 921, Section 9-5.1 entitled 'Documenting the Collection of Physical Evidence.'

Mr. Doran's testimony was also excluded as unreliable because much of his opinion rested on the reliability of Mr. Claytor's testimony, which the Court had already ruled unreliable. In analyzing Doran's reliability, the Court turned again to NFPA 921 and the McCoy decision, discussed above. The Court stated:

Granted, expert testimony has been held to be consistent with NFPA 921 and satisfy *Daubert* without independent testing. However, the failure to test, although not determinative of a preferred expert's status, is instructive. The Sixth Circuit has found that a failure to test a hypothesis may disqualify a witness from testifying as an expert.

Because of his failure to test his hypothesis, or even to disassemble the refrigerator, his opinion that a loose wire in the refrigerator caused the fault that led to the fire was found to be unreliable. The Court granted summary judgment to G.E. in this case. (Note that other decisions cited in this article did not require that the expert actually conduct a test, but merely required that the expert's hypothesis be testable.)

TNT Road Company v Sterling Truck Corp.¹¹ (July 19, 2004)

TNT Road Company's 1999 Freightliner truck, which was manufactured by Sterling Truck, caught fire. Both TNT and Sterling sued Lear Corporation, the manufacturer of the truck's ignition switch. James Adams, a fire investigator hired by TNT and "adopted" by Sterling, contended that the ignition switch was defective and caused the fire. Lear moved to exclude Adams' testimony on the basis that he was not qualified and that he had not conducted his investigation according to NFPA 921. The Court thought otherwise. The Court found Adams' experience working with electrical systems and his experience investigating vehicle fires provided him with a level of understanding beyond that of a lay juror when it comes to understanding how the electrical system in a vehicle might cause a fire. Further, the Court held that Adams' lack of experience as an expert witness did not have any relevance when it came to ascertaining his relative expertise in investigating vehicular fires and stated, "Even the most trial-hardened expert witness had his or her first day in court."

Commenting on Adams' methodology, the Court stated:

The parties and their experts are in agreement that a proper investigation of the subject fire should have conformed with the standards set forth in the National Fire Protection Association's publication #921 (NFPA 921), entitled *Guide for Fire and Explosion Investigations*. It appears that Adams' investigation substantially complied with the NFPA standard.

The Court went into a lengthy examination of all of Mr. Adams' investigative activities, including a discussion of his awareness of the potential for spoliation of evidence. The Court stated:

Because he had located what he suspected may be the cause of the fire, he suspended his investigation until other interested persons could have an opportunity to inspect the truck, in accordance with the principles of NFPA 921.

In another interesting sidelight, the Court addressed the issue that Lear raised about Mr. Adams forming an opinion after a two-hour inspection (which should have been plenty). The Court stated:

Whether Adams substantially completed his investigation after two hours or whether he kept an open mind and continued to re-evaluate his opinion goes to weight.⁴ The fact that Adams may have formed his cause and origin opinion quickly might suggest a slipshod investigation or it might suggest that the evidence was relatively easy to interpret and clearly pointed to the ignition switch. It is apparent from the parties' papers that Adams has continued to evaluate his opinion in light of subsequent testimony by fact witnesses and none of that evidence rules out his opinion or exposes his basic methodology as unreliable.

Abon, Ltd. v Transcontinental Insurance Company¹² (June 16, 2005)

This case involved a fire that occurred on March 30, 1999, in Mansfield, Ohio. Abon was a business selling cards and coins. The fire origin was clearly defined, and Transcontinental, which provided property insurance coverage, hired James Churchwell, CFI, to do its investigation. Transcontinental also retained the services of three independent professional engineers to evaluate potential ignition sources located in or near the area of origin. Mr. Churchwell, after consulting with the electrical engineers, made a determination that the fire had been intentionally set, and Transcontinental denied the claim. Abon sued in 2002, and in March of 2003, both parties moved for partial summary judgment. The trial court issued an order dismissing the bad faith claim of the plaintiff, and the matter came to trial before a jury in December of 2003. The jury returned a verdict in favor of Transcontinental on its affirmative defense of misrepresentation, but did not reach a verdict on the arson issue. Abon appealed, and among the errors alleged was that the trial court erred in allowing at trial the expert testimony of James Churchwell. The Appeals Court in its decision carefully examined the reliability issues, and concluded that the trial court did not abuse its discretion when it permitted Mr. Churchwell's testimony regarding the cause and origin of the fire. Mr. Churchwell testified that he had followed NFPA 921, and the Appeals Court wrote:

The National Fire Protection Association 921, *Guide for Fire and Explosion Investigations (921)*, is a peer-reviewed and generally accepted standard in the fire investigation community.

⁴ Faced with a motion to exclude expert testimony, the Court is ruling on the admissibility of the testimony, not whether it is correct. When the Court states, "It goes to weight," they are referring to the "weight" that the jury may give the testimony, as opposed to whether the testimony is admissible.

It then cited the case of *Royal Insurance v Joseph Daniel Construction* (Southern District of New York, 2002) and *Travelers Property & Casualty v General Electric Company* (District of Connecticut, 2001). In essence, the Court found that because Mr. Churchwell followed the scientific method and NFPA 921, his testimony had been properly admitted.

Workman v AB Electrolux Corp.¹³ (August 8, 2005)

On January 4, 2002, Mark Workman parked his truck, a 1994 Ford F-150 pickup truck, in the garage, and about forty-five minutes later, a fire was noted in the garage. Shelter Insurance Company, Workman's carrier, hired Carl Martin to investigate the fire, and he opined that the fire originated in a Kenmore freezer manufactured for Sears by Electrolux Corporation. Shelter Insurance sued Electrolux Corporation in a subrogation action. Electrolux was afforded the opportunity to examine the freezer, but between the time of Mr. Martin's investigation and Electrolux's joint examination of the freezer with Mr. Martin and an electrical engineer, Mr. Stemmerman, the truck was destroyed.

Using the language in NFPA 921, the Court held that the truck should have been preserved, and prevented Plaintiffs' experts from testifying about their "elimination" of the truck as the potential origin of the fire. Plaintiffs' experts were, however, allowed to opine about their determination that the freezer had caused the fire.

This decision pointed out the complexities of subrogation product liability cases in which defense experts are capable of forming opinions about the product not causing the fire. Because Electrolux's experts were able to form opinions that the freezer did not cause the fire, the Court refused to dismiss the case on the grounds of spoliation, i.e., the loss of the truck. Throughout this opinion, the Court referred to the adherence of Mr. Martin and Mr. Stemmerman to the guidance of NFPA 921, except in that they allowed the truck to be destroyed, which NFPA 921 specifically says should not be done. In its ruling, the Court stated:

Martin developed his opinion based on the methodology set forth in NFPA 921, which represents the national standard with regard to appropriate methodology for investigation by fire science experts....Martin followed the NFPA 921 methodology and applied it to the facts of this case based on his own detailed destructive examination of the freezer.

In discussing potential sanctions for the loss of the truck, which the Defendant, Electrolux, claimed was spoliation of evidence, the Court engaged in a lengthy analysis of NFPA 921's guidance on spoliation and referred to Section 9.3.6.3, which states:

Efforts to photograph, document, or preserve evidence should apply not only to evidence relevant to an investigator's opinions, but also to evidence of reasonable alternate hypotheses that were considered and ruled out.

The Court held that Shelter's failure to preserve the truck for Electrolux's experts to examine constituted spoliation of evidence, and as a sanction, prohibited Shelter's experts from opining that they had "eliminated" the truck as the cause of the fire. Given that this was a Ford truck with a known defect, this does not seem to be an unreasonable sanction.

Conclusion

The cases cited above amount to what is known as a "body of law." Dozens of other cases have resulted in similar rulings, either excluding fire experts for failing to follow the guidance of NFPA 921, or admitting their testimony because they did follow NFPA 921. Many of these subsequent cases cite the cases listed here.

There are some who would like to believe that there is no one "standard of care" for the fire investigation profession. Ten years ago, those people may have been correct. Their mantra about NFPA 921 is "It's only a guide." The cross examination question is essentially the same whether it is a "standard" or a "guide," i.e., "Why did you fail to follow the standard?" or "Why did you fail to follow the guide?" In US courts today, failing to follow NFPA 921 is the same as asking the court to exclude your testimony.

Readers are no doubt familiar with exchanges on bulletin boards wherein certain investigators opined that there is no standard of care. Those people are fighting a rearguard action and would do best to acknowledge the reality of the situation.

REFERENCES

¹ **KUMHO TIRE CO. V. CARMICHAEL**, 526 U.S. 137, 143 L. Ed. 2d 238, 119 S. Ct. 1167 (1999).

² **TRAVELERS PROPERTY & CASUALTY CORP. VS. GE** District of Connecticut 150 F. Supp. 2d 360; 57 Fed. R. Evid. Serv. (Callaghan) 695; CCH Prod. Liab. Rep. P16,181; 2001 U.S. Dist. LEXIS 14395.

³ **DAUBERT V. MERRELL DOW PHARMACEUTICALS, INC.**, 509 U.S. 579, 125 L. Ed. 2d 469, 113 S. Ct. 2786 (1993).

⁴ **CHESTER VALLEY COACH WORKS VS. FISHER-PRICE, INC.**, Eastern District of Pennsylvania 2001 U.S. Dist. LEXIS 15902.

⁵ **SNODGRASS VS. FORD MOTOR COMPANY DISTRICT OF NEW JERSEY** 2002 U.S. Dist. LEXIS 13421.

⁶ **ROYAL INSURANCE CO. OF AMERICA VS. JOSEPH DANIEL CONSTRUCTION** Southern District of New York, 208 F. Supp. 2d 423; 2002 U.S. Dist. LEXIS 12397

⁷ **UTAH VS. TROY LYNN SCHULTZ** 2002 UT App 366; 58 P.3d 879; 460 Utah Adv. Rep. 21; 2002 Utah App. LEXIS 112.

⁸ **MCCOY VS. WHIRLPOOL CORP., District of Kansas**; 2003 U.S. Dist. LEXIS 6901.

⁹ **TUNNELL VS. FORD MOTOR CO. Western District of Virginia** 330 F. Supp. 2d 707; 2004 U.S. Dist. LEXIS 24594.

¹⁰ **IND. INS. CO. VS. GE, Northern District of Ohio** 2004 U.S. Dist. LEXIS 13400.

¹¹ **TNT RD. CO. VS. STERLING TRUCK CORP. District of Maine** 2004 U.S. Dist. LEXIS 13463.

¹² **ABON, LTD. VS. TRANSCONTINENTAL INS. CO., Ohio Court of Appeals** 2005 Ohio 3052; 2005 Ohio App. LEXIS 2847.

¹³ **WORKMAN VS. AB ELECTROLUX CORP. District of Kansas** 2005 U.S. Dist. LEXIS 16306.