

UNITED STATES DISTRICT COURT  
DISTRICT OF MAINE

TNT ROAD COMPANY, et al.,	)	
	)	
Plaintiffs,	)	
	)	
v.	)	
	)	Civil No. 03-37-B-K
STERLING TRUCK CORPORATION,	)	
	)	
Defendant.	)	
_____	)	
	)	
STERLING TRUCK CORPORATION,	)	
	)	
Third-Party Plaintiff,	)	
	)	
v.	)	
	)	
LEAR CORPORATION,	)	
	)	
Third-Party Defendant.	)	

**MEMORANDUM OF DECISION<sup>1</sup>**

This Memorandum of Decision addresses third-party defendant Lear Corporation's motion to exclude the testimony of James Adams. (Docket No. 49.) The plaintiffs, TNT Road Company and its insurers, and the defendant/third-party plaintiff Sterling Truck Company have designated Mr. Adams as a cause and origin expert in connection with this litigation, which arises out of a fire that started in TNT Road Company's 1999 Freightliner truck, which was manufactured by Sterling Truck. Mr. Adams is of the opinion that the fire started spontaneously in the truck's ignition switch and that the fire could only have started there if the switch were defective. Third-party

---

<sup>1</sup> Pursuant to 28 U.S.C. § 636(c), the parties have consented to have United States Magistrate Judge Margaret J. Kravchuk conduct all proceedings in this case, including trial, and to order entry of judgment.

defendant Lear manufactured the switch. According to Lear, Mr. Adams is not qualified to render an expert opinion and his investigation was too faulty to be admissible under Federal Rule of Evidence 702.

### **Discussion**

Pursuant to Rule 702 of the Federal Rules of Evidence:

If 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, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

In Daubert v. Merrell Dow Pharms., Inc., 509 U.S. 579 (1993), the Supreme Court assigned to federal judges the gatekeeping role of screening from introduction in evidence expert testimony that, although relevant, is nevertheless based on unreliable scientific methodologies. Id. at 597. In General Elec. Co. v. Joiner, 522 U.S. 136 (1997), the Supreme Court explained that a judge exercising this duty must evaluate whether the challenged expert testimony is based on reliable scientific principles and methodologies in order to ensure that expert opinions are not "connected to existing data only by the ipse dixit of the expert." Id. at 146. The latest Supreme Court pronouncement on Rule 702, Kumho Tire Co. v. Carmichael, 526 U.S. 137 (1999), extended the gatekeeping obligation to all manner of expert testimony that would purport to introduce specialized knowledge or opinion, whether such knowledge or opinion might properly be classified as "scientific" or not. Id. at 147-48. The Kumho Court reiterated that the gatekeeping function is "a flexible one" that "depends upon the particular circumstances of the particular case at issue." Id. at 150; see also Daubert, 509 U.S. at 591, 594. In this vein,

the First Circuit Court of Appeals has stated that "because the exact inquiry undertaken by the district court will vary from case to case, the district court need not follow any particular procedure in making its determination." United States v. Diaz, 300 F.3d 66, 73 (1st Cir. 2002).

It is the proponent of the challenged evidence who carries the burden of proof. That burden is not to prove that his or her expert's opinion or conclusion is correct, but that "the expert's conclusion has been arrived at in a scientifically sound and methodologically reliable fashion." Ruiz-Troche v. Pepsi Cola of P.R. Bottling Co., 161 F.3d 77, 85 (1st Cir. 1998). In meeting this burden, the proponent must not assume that an evidentiary hearing will be held; the trial court has the discretion to decide the motion on briefs and with reference to expert reports, depositions and affidavits on record. Diaz, 300 F.3d at 73-74. Thus, it is incumbent on the proponent to ensure that the record contains evidence explaining the methodology the expert employed to reach the challenged conclusion and why this methodology is a reasonably reliable one to employ.

Lear contends that James Adams does not have expert qualifications and that he failed to conduct a reliable investigation of the cause and origin of the vehicle fire. According to Lear, Adams should not be permitted to testify because he lacks a college degree, is not a certified fire investigator, is not a licensed private investigator,<sup>2</sup> has

---

<sup>2</sup> According to Lear, Adams's testimony must be excluded because Adams is not licensed by the State of Maine as a private investigator. Title 32 M.R.S.A. §§ 8101-8120A govern the licensure of private investigators in Maine. The statute defines a private investigator as one who, for consideration, engages in investigations of, among other things, "fires, losses, accidents, or damage or injury to persons or property." Id., § 8103. The statute prohibits persons from acting as private investigators without first obtaining a license. Id., § 8104(1). The statute excepts various individuals acting in particular capacities from the licensure requirement, including attorneys acting in a professional capacity and insurance adjusters or investigators. Id., § 8104(2)(F)&(H). Acting as a private investigator without a license is a class D crime. Id., § 8114. Assuming that Adams was required by Maine law to have a license to conduct his investigation of the vehicle fire in this case, I am not persuaded that his failure to do so justifies the

provided expert testimony at trial only once before (in a case that did not involve a vehicle fire), did not have under his belt a sufficient number of hours in related coursework when he conducted his investigation of this vehicle fire, did not interview every conceivable witness, came to his conclusion in relatively short order (two hours), relied heavily on theory and circumstantial evidence in forming his opinion and used the word speculative twice at his deposition. These critiques raise genuine questions about Adams's qualifications and methodology. The plaintiffs' response adequately answers them.

1. *Adams has demonstrated sufficient knowledge, skill, training and education to qualify as an expert.*

After about two decades of work in the automotive industry, including ten years as a truck mechanic, James Adams opened his own business in 1980 rebuilding heavy-duty electrical components, such as starters, alternators, and generators. Since approximately 1990, Adams has accepted hundreds of jobs investigating vehicle and equipment losses, several of which involved fires. Since 1999, Adams has attended several courses related to fire and arson investigation sponsored by the Massachusetts Chapter of the International Association of Arson Investigators. As of this date, Adams has accrued some 30-36 credit hours in coursework related specifically to vehicle fires, although only 6-12 of these hours were obtained prior to the investigation of this fire. Since 1999, Adams has engaged in some 12 vehicle fire, cause and origin investigations, including the instant truck fire. Five of these investigations predated the instant

---

exclusion of his testimony. Nor do I think that his failure to obtain a license prevents the court from considering his expert qualifications or the reliability of his investigatory methods.

investigation.<sup>3</sup> Adams has conducted each of these investigations as an associate or independent contractor working for Douglas G. Peterson & Associates, Inc., a forensic engineering firm, which has provided him with on-the-job training and informal education in forensic methodology. Adams's experience working with electrical systems and his experience investigating vehicle fires provide 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. Although Adams may not be the most highly educated or experienced expert when it comes to electrical fires in vehicles, that fact goes to weight, not admissibility. He does have specialized knowledge that I, for one, certainly lack and that knowledge appears to be well suited both to an investigation of this type and to assist the factfinder to understand the evidence or determine a fact in issue.<sup>4</sup> Finally, I do not consider Adams's lack of experience in the witness box as having any relevance when it comes to ascertaining his relative expertise at investigating vehicular fires. Although prior experience as a testifying expert witness is some indication that one is actually an expert in something, the lack of such experience says little to nothing. Even the most trial-hardened expert witness had his or her first day in court.

2. *Adams's methodology appears reliable.*

The plaintiffs appropriately recount the relevant steps and stages of Adams's investigation to demonstrate the reliability of his methodology, drawing on Adams's deposition testimony and an affidavit submitted in connection with their opposition to the Daubert motion. The parties and their experts are in agreement that a proper

---

<sup>3</sup> According to Adams, there were more vehicle fire investigations prior to 1999, but he has not maintained records of them.

<sup>4</sup> This would be the case even if I disregarded the 24 credit hours Adams obtained on the subject of investigating vehicle fires in May of this year.

investigation of the subject fire should have conformed with standards set forth in the National Fire Protection Association's publication number 921 (NFPA 921), entitled "Guide for Fire and Explosion Investigation." It appears that Adams's investigation substantially complied with the NFPA standard. The investigation proceeded as follows:

1. He conducted this investigation in accordance with the procedures set forth in NFPA 921. He had an outline with him that customizes the NFPA 921 approach to a particular assignment. The NFPA 921 is a generic guide to fire investigations, and includes a lot of things that were not necessary to address in this particular case. Adams Deposition, p. 57-58. Adams Affidavit, ¶¶ 10-11.
2. His first step was to meet with the owners of the truck, Steven and Richard Theriault. They provided to him the basic information about the truck which is outlined in NFPA 921, § 15.5, which is attached to Plaintiffs' Motion as Exhibit 2. Adams Deposition, p. 49; Adams Affidavit, ¶ 13.
3. His basic approach is to start at a distance from the truck, and work from the areas showing the least amount of fire damage, into the areas where there is more intense burning or heat. Adams Deposition, p. 57.
4. He walked around the vehicle twice, and took extensive photographs before he touched anything. He photographed the overall scene of the fire, the damage to the building, and all surfaces and portions of the vehicle. *Id.* His photographic record of the scene was made in accordance with NFPA 921, § 15-4.1, a copy of which is attached to Mr. Adams's affidavit.
5. He then removed a tarp which had been covering the vehicle, and took photos of the most-heavily burned areas. Adams Deposition, p. 60.
6. In sharp contrast to Lear's suggestion that Mr. Adams did not rule out other possible causes of the fire, Mr. Adams inspected and photographed various parts of the vehicle that were potential causes of the fire. Based on his examination of these components of the truck, and their relation to the location of the most severe damage, he was able to rule out the following components of the truck as possible causes of the fire:

- a. He inspected the fuel tanks and found them to be full after the fire, which rules out the fuel tanks as the cause or origin. Adams Deposition, p. 107.
- b. He inspected the battery. It still had residual power after the fire, which would provide a source of electrical current to the ignition switch at the time of the fire. Adams Deposition, p. 107.
- c. He was aware there were accessories added to the truck after manufacture, including the CB radio, the stereo, the cell phone, and the back up lights, but was able to rule these out because these circuits would not be energized if the ignition switch is in the "off" position. TNT's mechanics testified that these accessories were connected to factory-installed power points, which are not energized when the switch is in the "off" position. He confirmed through his inspection of the switch that it was in the "off" position at the time of the fire. Adams Affidavit, ¶ 49.
- d. He eliminated the alternator because there was evidence of greater heat in the area of the ignition switch than in the area of the alternator. Except in the very localized area of the switch, all of the wires were burned fairly evenly. Adams Deposition, p. 109.
- e. He inspected the starter, and concluded it was not the origin of the fire because the truck was not heavily burned below the frame level, and the starter itself was not excessively burned. In addition, if the starter had malfunctioned, it most likely would have just run the battery down. Adams Deposition, p. 111, 127.
- f. He traced the battery cables and found no damage that would have caused the fire. Adams Deposition, p. 112.
- g. He inspected the power distribution center and saw even burning that would indicate it was burned as a result of the fire, and not as a cause of the fire. Adams Deposition, p. 112.
- h. He eliminated the engine block heater and the fuel heater as possible sources of the fire, because it is highly unlikely that these would be used inside a heated garage. See Adams Deposition, Errata Sheet.
- i. He inspected the chassis wiring harness, but it was mostly destroyed in the fire. Based on what he could observe, he eliminated it as a cause of the fire because it was burned evenly. If the fire had started within a particular wire, he would expect to see

heavier beading and arcing in one location, and he did not observe that. Adams Deposition, p. 114-116.

j. He eliminated arson as a cause of the fire based on his discussions with the owners of TNT Road Company, based on the fact that it was a solid, substantial business, and because the owners immediately began looking for another truck to replace the one that burned. Adams Deposition, p. 120.

k. He obtained and reviewed the maintenance records for the truck which showed no evidence that the windshield was cracked or replaced. Mr. Adams considers these maintenance records to be more reliable evidence that the windshield was not cracked or replaced, than the testimony of Mr. Hebert, who could not recall whether the windshield had been cracked or replaced. There is no evidence whatsoever that the windshield leaked at the time of this fire, or that a leak in the windshield caused or contributed to this fire. Adams Affidavit, ¶ 18-19.

7. After he had conducted a thorough examination of the entire truck, he focused in on the area of maximum damage, the cab of the truck. He then approached the truck and began to "delayer" the fire specifically and in detail. Adams Deposition, p. 60-61. "Delaying" means removing portions of the debris, identifying it, and photographing it, moving from the top of the debris pile down. Typically, one piece of debris is removed at a time. The manner in which the debris is removed depends on the materials, the extent of damage, and the burn pattern. Adams Deposition, p. 61-63.
8. Going into his inspection, he had formed no opinions as to the cause of the fire. However, once he saw the ignition switch, he immediately began to suspect it as the cause of the fire. Adams Deposition, p. 63.
9. He immediately suspected the switch for a number of reasons, including:
  - a. The switch had separated. The black plastic portion of the switch, which contains the electrical contact area of the switch, had separated from the zinc body. The zinc body was embedded in the debris about three inches from the black plastic housing of the switch. Adams Deposition, p. 66, 71.
  - b. The switch was charred, but only in a particular part of the switch. He also observed "beading" on the contacts of the switch. Adams Deposition, p. 66-69.

- c. The truck showed generally even burning and heating throughout, except on this switch. He found excessive heating in one particular area of the switch, where the plastic portion of the switch is charred and cracked. The localized charring was the result of electrical activity, and not the result of a fire that started somewhere else. Adams Deposition, p. 71-72.
- d. The ignition switch had been subjected to enough heat to melt the zinc portion of the switch; however, less than two inches away, there was a headlight switch, of fairly similar design, which was not affected at all. If the ignition switch was subjected to excessive, localized heat that did not affect components less than two inches away, then the heat must have originated in the switch. Adams Deposition, p. 103.
- e. A spring within the ignition switch had been subjected to excessive heat which caused it to deform and collapse. This heat must have been applied to the switch while it was still intact (i.e., before the zinc and plastic parts separated), because otherwise the spring would not have collapsed. This indicates that the excessive heat originated within the switch. Adams Deposition, p. 103-104.
10. Mr. Adams then took extensive photographs of the switch to document his observations. Adams Deposition, p. 67-69.
11. Because he had located what he suspected may be the cause of the fire, he suspended his investigation until other interested persons could have the opportunity to inspect the truck, in accordance with the principles of NFPA 921. He did this to preserve evidence for others, and not because he had made up his mind about the cause of the fire. He also told Mr. Theriault, the owner of the truck, to preserve it for inspection by others. Adams Deposition, p. 72; Adams Affidavit, ¶ 16.
12. Mr. Adams did not begin to suspect the switch as the cause of the fire until after he had spent a couple of hours doing a thorough inspection of the truck. Adams Deposition, p. 74. His analysis of this fire continued for months, even years, after the date of that initial investigation, and included another inspection in the company of Sterling and its experts. All additional inspections and evidence have confirmed his original finding that the ignition switch was the cause of the fire. Adams Affidavit, ¶ 17, 29.

(Plaintiffs' Opp'n. to Third Party Def. Lear Corp.'s Mot. to Exclude, Docket No. 61, at 9-12.) My evaluation of this presentation is that Adams utilized a reliable methodology to arrive at his opinion that the origin of the fire was in the ignition switch. In its reply to the plaintiffs' opposition memorandum, Lear attempts to raise a handful of inconsistencies between Adams's deposition testimony and his affidavit. My review of these materials indicates that none raises a sufficient concern to justify exclusion of Adams's testimony. Whether Adams substantially completed his investigation after two hours or whether he kept an open mind and continued to reevaluate his opinion goes to weight. 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 that none of that evidence rules out his opinion or exposes his basic methodology as unreliable.

### **Conclusion**

The plaintiffs succeed in carrying their burden of establishing that Mr. Adams is qualified to present expert testimony on the cause and origin of the vehicle fire in this case. Lear's motion (Docket No. 49) is **DENIED**.

*So Ordered.*

Dated July 19, 2004

/s/ Margaret J. Kravchuk  
U.S. Magistrate Judge

TNT ROAD COMPANY et al v. STERLING  
TRUCK CORPORATION  
Assigned to: MAG. JUDGE MARGARET J.  
KRAVCHUK

Date Filed: 03/17/03  
Jury Demand: Both  
Nature of Suit: 385 Prop. Damage

Referred to:  
Demand: \$  
Lead Docket: None  
Related Cases: None  
Case in other court: None  
Cause: 28:1332 Diversity-Property Damage

Prod. Liability  
Jurisdiction: Diversity

**Plaintiff**

-----

**TNT ROAD COMPANY**

represented by **WENDELL G. LARGE**  
RICHARDSON, WHITMAN,  
LARGE & BADGER  
465 CONGRESS STREET  
P.O. BOX 9545  
PORTLAND, ME 4112-9545  
(207) 774-7474  
Email: wlarge@rwlb.com  
*LEAD ATTORNEY*  
*ATTORNEY TO BE NOTICED*

**PAUL R. JOHNSON**  
RICHARDSON, WHITMAN,  
LARGE & BADGER  
465 CONGRESS STREET  
P.O. BOX 9545  
PORTLAND, ME 4112-9545  
(207) 774-7474  
Email: prjohnson@rwlb.com  
*ATTORNEY TO BE NOTICED*

**ACADIA INSURANCE  
COMPANY**

represented by **WENDELL G. LARGE**  
(See above for address)  
*LEAD ATTORNEY*  
*ATTORNEY TO BE NOTICED*

**PAUL R. JOHNSON**  
(See above for address)  
*ATTORNEY TO BE NOTICED*

**NATIONAL CASUALTY  
COMPANY**

represented by **WENDELL G. LARGE**  
(See above for address)  
*LEAD ATTORNEY*  
*ATTORNEY TO BE NOTICED*

**PAUL R. JOHNSON**  
(See above for address)  
*ATTORNEY TO BE NOTICED*

V.

**Defendant**  
-----

**STERLING TRUCK  
CORPORATION**

represented by **ROBERT H. STIER**  
PIERCE, ATWOOD  
ONE MONUMENT SQUARE  
PORTLAND, ME 04101-1110  
791-1100  
Email: rstier@pierceatwood.com  
*LEAD ATTORNEY*  
*ATTORNEY TO BE NOTICED*

**SCOTIA R. RYER**  
PIERCE, ATWOOD  
ONE MONUMENT SQUARE  
PORTLAND, ME 04101-1110  
Email: sryer@pierceatwood.com  
*TERMINATED: 01/29/2004*  
*ATTORNEY TO BE NOTICED*

**ThirdParty Plaintiff**  
-----

**STERLING TRUCK  
CORPORATION**

represented by **ROBERT H. STIER**  
(See above for address)  
*LEAD ATTORNEY*  
*ATTORNEY TO BE NOTICED*

**SCOTIA R. RYER**  
(See above for address)  
*ATTORNEY TO BE NOTICED*

V.

**ThirdParty Defendant**  
-----

**LEAR CORPORATION**

represented by **MARK E. DUNLAP**  
NORMAN, HANSON &  
DETROY  
415 CONGRESS STREET  
P. O. BOX 4600 DTS  
PORTLAND, ME 4112  
774-7000  
Email: mdunlap@nhdlaw.com  
*LEAD ATTORNEY*  
*ATTORNEY TO BE NOTICED*