

**IN THE UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF FLORIDA
PANAMA CITY DIVISION**

**UNITED FIRE AND CASUALTY
COMPANY, a/s/o Robert and Theresa
Corral,**

Plaintiff,

v.

CASE NO. 5:10-cv-199-RS-EMT

**WHIRLPOOL CORPORATION,
a Delaware corporation,**

Defendant.

_____ /

ORDER

Before me is Defendant’s motion to exclude the expert testimony of Raymond Arms and Dr. Kendall Clarke (Doc. 24) and Plaintiff’s memorandum in opposition (Doc. 28). Defendant claims that these witnesses do not qualify as experts under the *Daubert* standard.

Federal Rules provide that witnesses may testify as experts 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.” Fed. R. Evid. 702. *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), put forth a two-pronged analysis

used to determine the admissibility of the proffered expert testimony on issues under Rule 702.

First, the expert testimony must be reliable, so that it must be “scientific,” meaning grounded in the methods and procedures of science, and must constitute “knowledge,” meaning something more than subjective belief or unsupported assumptions. *McDowell v. Brown*, 392 F.3d 1283, 1298-99 (11th Cir. 2004) (citing *Daubert*, 509 U.S. at 590).

Daubert's reliability prong sets out four guideposts that a district court may consider in assessing the reliability of the expert testimony, which include, but are not limited to: (1) whether the expert's methodology has been tested or is capable of being tested; (2) whether the technique has been subjected to peer review and publication; (3) the known and potential error rate of the methodology; and (4) whether the technique has been generally accepted in the proper scientific community. *Id.* (citing *Daubert*, 509 U.S. at 593-94; *Allison v. McGhan Medical Corp.*, 184 F.3d 1300, 1312 (11th Cir. 1999); *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 149 (1999)).

However, district courts are given broad discretion when determining whether an expert’s testimony is reliable. The Supreme Court in *Kumho Tire Co.* has ruled that

[A] trial court may consider one or more of the more specific factors that *Daubert* mentioned when doing so will help determine that testimony’s

reliability. But, as the Court stated in *Daubert*, the test of the reliability is “flexible,” and *Daubert*’s list of specific factors neither necessarily nor exclusively applies to all experts in every case. Rather, the law grants a district court the same broad latitude when it decides how to determine reliability as it enjoys in respect to its ultimate reliability determination.

526 U.S. at 141-42. In addition, other factors that a court may consider in the *Daubert* analysis are “reliance on anecdotal evidence, temporal proximity, and improper extrapolation.” *McDowell v. Brown*, 392 F.3d at 1298-99 (citing *Allison* 184 F.3d at 1312). Finally, a court should meticulously focus on the expert's principles and methodology, and not on the conclusions that they generate. *Id.*

The second prong of the *Daubert* analysis requires that the proposed testimony be relevant. To meet this requirement, the expert testimony must be “ ‘relevant to the task at hand,’ ... i.e., that it logically advances a material aspect” of the case. *Daubert* 509 U.S. at 591. The relevance requirement is not satisfied where the proffered testimony does not assist the trier of fact. Fed. R. Evid.702.

Raymond Arms

Raymond Arms was designated as the Plaintiff’s Cause and Origin and Electrical Engineering expert. Defendant argues that Mr. Arms’s testimony should be excluded because (1) it is not grounded in reliable methodology, (2) the facts do not “fit” the theory, and (3) the theories were never tested.

Arms stated that he follows the NFPA 921, Guide for Fire and Explosion Investigations, when investigating fires. (Doc 23, Exhibit C, p. 20). The purpose of NFPA 921:

. . . is to establish guidelines and recommendation for the safe and systematic investigation or analysis of fire explosion incidents. . . . This document has been developed as a model for the advancement and practice of fire and explosion investigation, fire science, technology, and methodology.

(Doc. 23, Exhibit I § 1.2.1). The NFPA goes on to say that

To understand an appliance more fully, to test its operation, or to explore failure mechanisms, the investigator *may* need to obtain and exact duplicate (i.E., an exemplar). . . . Exemplar appliances *can* be operated and tested to establish the validity of the proposed ignition scenario. . . . The testing should show not just that the appliance is capable of generating heat, but that such heat is of sufficient magnitude and duration to ignite combustible material.

(*Id.* at §§24.5-6)(emphasis added). It is clear that testing on exemplars is not required for a theory to be reliable.

However, there has to be some evidence substantiating the expert's opinion to find it reliable. “[N]othing in either *Daubert* or the Federal Rules of Evidence required a district court to admit opinion evidence which is connected to existing data only by the *ipse dixit* of the expert.” *Michigan Millers Mut. Ins. Corp. v. Benfield*, 140 F.3d 915, 921 (11th Cir. 1998)(quoting *General Elec. Co. v. Joiner*, 118 S.Ct. 512, 519 (1997)).

Plaintiffs contend that the testimony is reliable because of Arms's experience with identifying the cause and origin of fires. The Eleventh Circuit decided a case involving a house fire, *Michigan Millers Mut. Ins. Corp. v. Benfield*, and determined that because the expert "testified that he had complied with the scientific method within his field of science in determining the cause and origin of the fire" that the testimony was "science-based, rather than experience-based." 140 F.3d at 920. The Court went on to say that his testimony was unreliable because the expert had performed no tests, had not taken any samples, and could not rationally explain how he came to his conclusion using anything but his own opinion.

The same conclusions can be drawn in this case. Arms testified that he followed the guidelines for investigating fires established by the NFPA, and therefore, his testimony is science-based, not experience-based. (Doc 23, Exhibit C, p. 20). Arms's theory is that "1) 'The wire faulted with the tube;' 2) for that to happen, 'it had to either have a defect, such as a piece of wire nicked out . . . or it was vibrating to cause abrasion on the wire such that the insulation thinned so that 120 volts would conduct between the wire and the tube . . . it could have been a pinch . . . it could have been an abrasion;' 3) regardless, 'it allowed electricity to flow through a resistance between the wire and the tube.'" (Doc. 28, p. 5). Arms came to this conclusion using his experience and Clarke's conclusion that the dryer

was on when the fire began. However, Arms admits that this type of ignition theory has never been published in a peer-reviewed journal of scientific literature or engineering studies. In addition, Arms failed to perform any tests on an exemplar and to test the ignition sequence he claims started the fire, so there is no known rate of error in the methodology.

Additionally, Arms's testimony was excluded from a remarkably similar case involving a house fire in the Eighth Circuit. In *Presley v. Lakewood Engineering, Inc.*, Arms did not perform any testing on the ignition sequence and failed to provide any scientific publications supporting his ignition theory. 555 F.3d 639 (8th Cir. 2009). Arms did order metallurgical tests, as he did in this case, but the Court stated that “[a]lthough plaintiffs contend Arms’s observations, the metallurgical tests, the C&A flammability tests, and the references to NFPA 921 sections are adequate bases for reliability, it was not an abuse of discretion for the district court to find Arms’s theory required too great an inferential leap from these bases.” *Id.* at 646. Plaintiffs argue that *Presley* can be differentiated since Arms’s testimony was excluded because he was brought in at the eleventh hour and was not given the opportunity to do any tests. However, Arms was involved in this case from the start and still failed to perform any tests that would support his opinions.

As in *Benfield* and *Presley*, Arms's testimony is not reliable because it appears to be based solely on opinions that have not been substantiated. Although testing on exemplars is not required, in an area such as the fire sciences, testing is an important way to show reliability. Without testing or peer-reviewed publications to support his theories, Arms's opinions are just that—opinions. Unsubstantiated opinions fail to meet the standard set forth in *Daubert*.

Dr. Kendall Clarke

Dr. Clarke is a metallurgy expert with a bachelor's degree in engineering, master's degree in extractive metallurgy, and a doctorate in fracture mechanics. Arms retained Dr. Clarke to examine the metal exhaust tube that Arms believed caught on fire first and to estimate the temperatures it reached during the fire. He examined three sections of the tube with different types of microscopes and determined that because the steel was melted, the fire must have reached at least 2800 degrees Fahrenheit, and in order to reach that temperature, the fan inside the dryer must have been on when the fire started. (Doc. 28 p. 6-8). Defendant argues that Clarke's testimony should be excluded because (1) he is not a cause and origin expert, (2) he speculated that lint was involved in the start of the fire, and (3) his methodology is unreliable.

Clarke was not retained as a cause and origin expert, but as a metallurgist for the specific purpose of examining the dryer tube. Therefore, Defendant's first two arguments are irrelevant.

Dr. Clarke's testimony is void of any sources that confirm his conclusion that the tube must have reached at least 2800 degrees. Plaintiff claims this is based on Dr. Clarke's knowledge of basic metallurgy from his undergraduate and graduate studies. However, Dr. Clarke was not aware of any publications that supported his conclusions. (Doc. 23, Exhibit G, p. 100). If this was such a basic metallurgic fact, then surely there would be some type of publication (such as a textbook) that would support this opinion. In addition, Dr. Clarke stated that he could have attempted to replicate the temperatures reached in the dryer duct but that he was not asked to for his job. (*Id.*) Once again, we are left to rely on the opinion of one person without any supporting literature or tests, which does not meet the reliability test in *Daubert*.

Defendant's motion is granted (Doc. 24). The purposed expert testimony of Raymond Arms and Dr. Kendall Clarke will be excluded at trial.

ORDERED on September 20, 2011.

/s/ Richard Smoak
RICHARD SMOAK
UNITED STATES DISTRICT JUDGE