

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLORADO
Judge Philip A. Brimmer

Civil Action No. 08-cv-00491-PAB-MEH

AMY BULLOCK, as an individual, as the next of kin and personal representative of
JEFFREY BULLOCK, deceased, and as parent and next friend of
ADAM BULLOCK, CHELSEA BULLOCK, and MELISSA BULLOCK,

Plaintiff,

v.

DAIMLER TRUCKS NORTH AMERICA, LLC,
formerly known as FREIGHTLINER, LLC,

Defendants.

ORDER ON PLAINTIFF'S RULE 702 MOTION

I. INTRODUCTION

Plaintiff Amy Bullock brought this product liability case against defendant Daimler Trucks North America, LLC ("Daimler") following a motor vehicle accident in which Ms. Bullock's husband, Jeffrey Bullock, was killed. On August 15, 2006, Mr. Bullock, a commercial truck driver for Dominos Pizza, was on a delivery route in the mountains of Colorado with co-driver Donald Green. On their way through Monarch Pass in Gunnison County, Colorado, the truck went off the road. At the time of the accident, Mr. Green was driving and Mr. Bullock was a passenger. Mr. Green survived the accident. Mr. Bullock suffered severe injuries in the accident and died at the scene.

This matter is presently before the Court on plaintiff's motion to exclude the testimony of mechanical engineer Frank Entwisle, one of Daimler's expert witnesses, under Federal Rule of Evidence 702 [Docket No. 174].

II. FEDERAL RULE OF EVIDENCE 702

Pursuant to Federal Rule of Evidence 702,

[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, 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. As the rule makes clear, while required, it is not sufficient, that an expert be qualified based upon knowledge, skill, experience, training, or education to give opinions in a particular subject area. Rather, the Court must “perform[] a two-step analysis.” *103 Investors I, L.P. v. Square D Co.*, 470 F.3d 985, 990 (10th Cir. 2006).

After “determin[ing] whether the expert is qualified by ‘knowledge, skill, experience, training, or education’ to render an opinion,” *id.* (quoting Fed. R. Evid. 702), the specific proffered opinions must be assessed for reliability. *See id.*; Fed. R. Evid. 702 (requiring that the testimony be “based upon sufficient facts or data,” be the “product of reliable principles and methods,” and reflect a reliable application of “the principles and methods . . . to the facts of the case”).

Rule 702 “imposes on the district court a gatekeeper function to ‘ensure that any and all scientific testimony or evidence admitted is not only relevant, but reliable.’” *United States v. Gabaldon*, 389 F.3d 1090, 1098 (10th Cir. 2004) (quoting *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 589 (1993)). To execute that function, the Court must “assess the reasoning and methodology underlying the expert’s opinion, and determine whether it is both scientifically valid and applicable to a

particular set of facts.” *Dodge v. Cotter Corp.*, 328 F.3d 1212, 1221 (10th Cir. 2003) (citing *Daubert*, 509 U.S. at 592-93). When assessing reliability, “the court may consider several nondispositive factors: (1) whether the proffered theory can and has been tested; (2) whether the theory has been subject to peer review; (3) the known or potential rate of error; and (4) the general acceptance of a methodology in the relevant scientific community.” *103 Investors I*, 470 F.3d at 990 (citing *Daubert*, 509 U.S. at 593-94). These considerations are not exhaustive. Rather, “the trial judge must have considerable leeway in deciding in a particular case how to go about determining whether particular expert testimony is reliable.” *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 152 (1999). Ultimately, the test requires that the expert “employs in the courtroom the same level of intellectual rigor that characterizes the practice of any expert in the relevant field.” *Kumho Tire Co.*, 526 U.S. at 152.

While plaintiff, as the proponent of the challenged testimony, has the burden of establishing admissibility, her proffer is tested against the standard of reliability, not correctness; plaintiff need only prove that “the witness has sufficient expertise to choose and apply a methodology, that the methodology applied was reliable, that sufficient facts and data as required by the methodology were used and that the methodology was otherwise reliably applied.” *United States v. Crabbe*, 556 F. Supp. 2d 1217, 1221 (D. Colo. 2008).

In sum, expert testimony must be excluded if the expert is unqualified to render an opinion of the type proffered, if the opinion is unreliable, if the opinion will not assist the trier of fact, or if the opinion is irrelevant to a material issue in the case.

III. PLAINTIFF'S EXPERT – FRANK ENTWISLE

Plaintiff challenges several purported opinions of defendant's mechanical engineering expert, Frank Entwisle. See *generally* Pl.'s Rule 702 Mot. & Br. to Preclude Test. of H. Frank Entwisle [Docket No. 174] ("Pl.'s Entwisle Mot."). Mr. Entwisle states five opinions in his report:

1. The design of the 2004 Freightliner model CL 120, at the time of its manufacture was non-defective and reasonably safe. The design complies with applicable Standards and Regulations and the state-of-art for heavy truck cabs.
2. There is no evidence that had the Freightliner tractor been equipped with a yet undefined ROPS structure as suggested by plaintiff's expert that the outcome of the crash and Mr. Bullock's injuries would have been substantially altered. There is no evidence that the Freightliner or any of its components violated any regulations or standards. Proposed design changes by plaintiff's experts are not necessary to make the design of the Freightliner tractor reasonably safe.
3. Evidence in this matter is consistent that the available sleeper restraint in the Freightliner was not being utilized by Mr. Bullock at the time of the crash and that he was most probably pulled or ejected through the passenger side door.
4. Large trucks involved in fatal accidents experience a rollover rate comparable to passenger automobiles and a rate significantly less than light trucks. Fatalities to large truck occupants represent a small percentage of annual vehicle-related fatal injuries.
5. Study of heavy truck rollovers shows that 90-degree plus rolls with subsequent collision vary in the amount of roof and upper cab structure damage according to the aggressiveness of the impact. This crash was particularly aggressive due to the energy involved, the extent of roll, the multiple loading sequences and the localized nature of the PDOF applications.

Pl.'s Entwisle Mot., ex. 1 (Entwisle Report) at 7-8. In her Rule 702 motion, Ms. Bullock challenges portions of Mr. Entwisle's first, second, third, and fifth opinions.

Opinion No. 1: “The design of the 2004 Freightliner model CL 120, at the time of its manufacture was non-defective and reasonably safe. The design complies with applicable Standards and Regulations and the state-of-art for heavy truck cabs.”

Ms. Bullock first challenges Mr. Entwisle’s qualifications to opine about the safety of the truck involved in the present case or relevant regulations. Daimler responds by noting that,

Mr. Entwisle has 44 years of specific, relevant experience designing, testing, and evaluating every component of heavy trucks within the specific industry at issue in this case.

Over this period of time, Mr. Entwisle has designed, tested, and evaluated every component of heavy trucks that could conceivably be at issue in this case – by way of example only, and just during his twenty-two years in the heavy truck and equipment industry, he developed and conducted fatigue testing on truck chassis and body components, seat belts, rollover performance, door latch systems, interior components, and fuel systems. He has worked in various positions within the Society of Automotive Engineers to develop injury reduction systems, roof strength and side intrusion standards, and fuel containment systems. He has performed failure analysis testing on numerous truck components and performed specific crashworthiness evaluations and testing – including detailed analyses of heavy truck structural integrity and performance. As a consultant for the last twenty-two years, he has participated in design analysis, failure analysis, accident reconstruction, and technical education activities with regard to heavy trucks.

Def. Daimler Trucks North America, LLC’s Resp. to Pl.’s Rule 702 Mot. to Preclude Test. of H. Frank Entwisle [Docket No. 210] (“Def.’s Resp. to Entwisle Mot.”) at 4 (citations to record omitted). Having reviewed his background, training, and experience, the Court agrees that Mr. Entwisle is qualified under Rule 702 to testify regarding the safety of the truck and the regulations pertaining to its safety. See Fed. R. Evid. 702 (a witness may be “qualified as an expert by knowledge, skill, experience, training, or education . . .”)

That being said, even the most qualified expert may not rest solely on his or her qualifications in order to survive a Rule 702 challenge. Instead, the party proposing the expert must show that the proffered opinions were the product of a reliable methodology. See *United States v. Crabbe*, 556 F. Supp. 2d 1217, 1221 (D. Colo. 2008). Daimler describes Mr. Entwisle’s methodology as follows:

He familiarized himself in detail with the facts of this incident, including an inspection of the subject tractor as well as a review of all relevant documents and discovery. He reviewed Dr. Batzer’s report and deposition in detail and familiarized himself with the claims being raised at the time by the Plaintiff. He then, in general, compared these claims with his specific industry experience, his experience as a consultant, his knowledge of nationwide statistics related to heavy trucks, and his knowledge of current industry research and component utilization to determine whether they were consistent or inconsistent with his knowledge, training, and experience

Def.’s Resp. to Entwisle Mot. at 5-6.

Daimler is correct that “[t]he concept of a specific scientific methodology in this context is therefore, necessarily, an inexact one.” Def.’s Resp. to Entwisle Mot. at 5-6. There is nothing inherently problematic about such a methodology. Cf. *Bitler v. A.O. Smith Corp.*, 400 F.3d 1227, 1235 (10th Cir. 2005) (“Employing his experience and knowledge as a fire investigator, Boh observed the physical evidence at the scene of the accident and deduced the likely cause of the explosion. Although such a method is not susceptible to testing or peer review, it does constitute generally acceptable practice as a method for fire investigators to analyze the cause of fire accidents.”). Therefore, as a general matter, Mr. Entwisle’s methodology appears to be valid.

However, even where the methodology is an inexact one, the expert must “show his work.” Cf. *Hill ex rel. Hill v. Koppers, Inc.*, No. 3:03CV60-P-D, 2009 WL 4908836, at

*5 (N.D. Miss. Dec. 11, 2009) (“The expert is required to ‘show his work’ in his reports and the reports are to be ‘complete’ to the extent that any other person in the expert’s field could pick up the report and independently verify the contents therein. Otherwise, the opposing party would be required to rely on the mere *ipse dixit*, or learned say-so, of the expert which is clearly improper.”). In other words, Mr. Entwisle may not keep his analysis to himself. With respect to Mr. Entwisle’s opinion regarding the safety of the truck and its compliance with applicable standards and regulations, his report indicates the data he relied upon and analysis he undertook. See Pl.’s Entwisle Mot., ex. 1 at 4-6. The Court sees no defect in his approach and no obvious gaps in his reasoning. He bases his opinions regarding safety on his analysis of test results as compared to what the evidence showed happened in this case. As for regulatory compliance, there is nothing unusual about having this type of expert explain what applicable regulations are in place and then opine about compliance or non-compliance with those regulations.

Plaintiff’s arguments about the completeness of Mr. Entwisle’s data and potentially overlooked considerations do not undermine the reliability of the methodology. They, instead, relate to the weight which his opinions deserve. See *Compton v. Subaru of Am., Inc.*, 82 F.3d 1513, 1518 (10th Cir. 1996), *overruled on other grounds by Kumho Tire Co. v. Carmichael*, 526 U.S. 137 (1999) (“[A]s long as a logical basis exists for an expert’s opinion the weaknesses in the underpinnings of the opinion go to the weight and not the admissibility of the testimony.” (quoting *Jones v. Otis Elevator Co.*, 861 F.2d 655, 663 (11th Cir. 1988)) (quotation, alteration, and omission marks omitted)); see also *Zuchowicz v. United States*, 140 F.3d 381, 387 (2d

Cir. 1998) (“[D]isputes as to the strength of his credentials, faults in his use of differential etiology as a methodology, or lack of textual authority for his opinion, go to the weight, not the admissibility of his testimony.”).

The Court also concludes that Mr. Entwisle’s first opinion meets the relevance requirement of Rule 702. The safety and design of the truck involved in the accident are important issues in this litigation. See *Bitler v. A.O. Smith Corp.*, 400 F.3d 1227, 1234 (10th Cir. 2004) (in ascertaining the relevance of expert testimony, “[a] trial court must look at the logical relationship between the evidence proffered and the material issue that evidence is supposed to support to determine if it advances the purpose of aiding the trier of fact.”). Therefore, plaintiff’s Rule 702 motion regarding Mr. Entwisle’s first opinion is denied.

Opinion No. 2: “There is no evidence that had the Freightliner tractor been equipped with a yet undefined ROPS structure as suggested by plaintiffs expert that the outcome of the crash and Mr. Bullock’s injuries would have been substantially altered. There is no evidence that the Freightliner or any of its components violated any regulations or standards. Proposed design changes by plaintiffs experts are not necessary to make the design of the Freightliner tractor reasonably safe.”

Plaintiff next challenges Mr. Entwisle’s second opinion. In many ways this opinion is repetitive of his first opinion, except in reverse. For example, as the flip side of his first opinion – that the truck was reasonably safe – Mr. Entwisle explains that no additional measures are necessary to make it so. Also, his opinion about regulatory compliance in the first opinion finds its inverse here – i.e., no violations. While potentially somewhat repetitive, the Court sees no reason to exclude these opinions on that ground. Therefore, for the same reasons stated in the discussion of Mr. Entwisle’s

first opinion, the parallel aspects of his second opinion are reliable and relevant and may be offered by Mr. Entwisle at trial.

The one key difference between the first and the second opinion is Mr. Entwisle's mention in the latter of Mr. Bullock's injuries. While Mr. Entwisle may be qualified to opine about engineering issues, his qualifications regarding physical injuries to vehicle occupants remains in doubt.

Under Rule 702, an expert's qualifications may derive from knowledge, skill, experience, training, or education. "[A]s long as an expert stays within the reasonable confines of his subject area, our case law establishes a lack of specialization does not affect the admissibility of the expert opinion, but only its weight." *Ralston v. Smith & Nephew Richards, Inc.*, 275 F.3d 965, 970 (10th Cir. 2001) (quoting *Compton v. Subaru of Am., Inc.*, 82 F.3d 1513, 1520 (10th Cir.1996)) (quotation marks and alteration marks omitted); see also *Zuchowicz*, 140 F.3d at 387.

Daimler offers virtually nothing from which the Court can conclude that Mr. Entwisle has the necessary expertise to opine about relative risk of injury. Daimler's description of Mr. Entwisle's experience says nothing about such expertise. See Def.'s Resp. to Entwisle Mot. at 3-5. His report and curriculum vitae provide little more than loose inferences in this regard. Therefore, the Court concludes that Daimler has not met its burden in establishing that Mr. Entwisle is qualified to predict or opine about relative risks of injury.

Even if Mr. Entwisle was so qualified, he offers no glimpse into the methodology he used to arrive at his opinion whether "Mr. Bullock's injuries would have been

substantially altered.” Therefore, because Daimler has failed to demonstrate Mr. Entwisle’s qualifications or the reliability of the methodology behind his opinion, he is precluded from opining as to Mr. Bullock’s relative risk of injury under alternative truck designs.

Opinion No. 3: “Evidence in this matter is consistent that the available sleeper restraint in the Freightliner was not being utilized by Mr. Bullock at the time of the crash and that he was most probably pulled or ejected through the passenger side door.”

Mr. Entwisle’s third opinion raises two separate issues: whether Mr. Bullock was utilizing the restraint and whether Mr. Bullock exited the vehicle through the front passenger door. Both opinions involve vehicle safety and performance. Therefore, as discussed above, Mr. Entwisle is qualified to make these opinions.

As for the reliability of his methodology, his analysis of the first issue is methodologically sound based upon his qualifications and experience. Mr. Entwisle describes the physical evidence, the testimony, and post-accident testing which he believes establishes that the sleeper restraint was operational and unused during the accident. The second opinion – that Mr. Bullock “was most probably pulled or ejected through the passenger side door” – is a different story. The only apparent basis for this opinion is the testimony of individuals at the scene. However, none of these individuals know how Mr. Bullock exited the truck. Mr. Entwisle does not explain how he gets from this lack of evidence to a definitive opinion about Mr. Bullock’s exit path. There is no methodology for this conclusion revealed in his report. Therefore, this opinion amounts to little more than speculation and is not permissible under Rule 702.

Opinion No. 5: “This crash was particularly aggressive due to the energy involved, the extent of roll, the multiple loading sequences and the localized nature of the PDOF applications.”

Ms. Bullock also challenges the methodology and factual underpinning of Mr. Entwisle’s final opinion in his report. Ms. Bullock argues that Mr. Entwisle’s opinion is not reliable because he did not conduct an accident reconstruction.

Mr. Entwisle analyzed the data and reports about the accident and developed an opinion about how it transpired, including the severity of the forces at work. While the report lacks extensive details on the calculations involved, the opinion is not the kind of opinion that requires such detail. The Supreme Court has endorsed a district court’s discretion in making the level of scrutiny commensurate with the intricacy of the proposed opinion. *See Kumho Tire*, 526 U.S. at 152. Therefore, because Mr. Entwisle’s fifth opinion does not require an intricate methodology due to the nature of this accident and the obvious damage it caused to the truck, his more generalized methodology is valid and reliable. Because Mr. Entwisle’s final opinion is reliable, as well as relevant to a material issue in this case, it survives plaintiff’s Rule 702 challenge.

III. CONCLUSION

Based on the foregoing, it is

ORDERED that plaintiff Amy Bullock’s motion to exclude certain testimony of defendant Daimler Trucks North America, LLC’s expert witness, Frank Entwisle [Docket No. 174] is GRANTED in part and DENIED in part. Pursuant to Rule 702, Mr. Entwisle may not testify: 1) that it is statistically likely that, if the occupant survival space had not been significantly compromised and that the sleeper compartment door had not come

open, Jeffery Bullock's injuries, if any, would not have been serious or 2) that Mr. Bullock was most probably pulled or ejected through the passenger side door. Ms. Bullock's motion is denied in all other respects.

DATED September 30, 2010.

BY THE COURT:

s/Philip A. Brimmer
PHILIP A. BRIMMER
United States District Judge