

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 DEFENDANT'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 defendant Daimler's motion to exclude the testimony of mechanical engineer Dr. Stephen Batzer, one of Ms. Bullock's expert witnesses, under Federal Rule of Evidence 702 [Docket No. 191].

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 – DR. STEPHEN BATZER

Defendant's Rule 702 motion challenges several opinions of plaintiff's mechanical engineering expert, Dr. Stephen Batzer. See *generally* Def. Daimler Trucks North America, LLC's FRCP [sic] 702 Motion to Exclude Test. & Ops. of Dr. Stephen Batzer [Docket No. 190] ("Def.'s Batzer Mot."). Dr. Batzer states six opinions in his report:

1. This 2004 Freightliner Columbia was involved in a collision which involved rotation to the passenger's side of the vehicle, but was less than a full quarter collision. After the vehicle left the roadway, it dissipated its kinetic energy through friction (tire yaw, skidding, wind resistance), and plastic (permanent) and recovered elastic (temporary) deformation to the body caused by interaction with the guardrail and trees.
2. 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.
3. This vehicle was not designed and equipped with an effective rollover protection system to protect the occupants in the event of a rollover. It was not equipped with an effective sleeper berth restraint system capable of preventing ejection in a rollover event. It was not equipped with a strong roof structure to prevent significant intrusion into the occupant survival space and failure of the rear berth access door mounting hardware.
4. Body deformation caused failure of the sleeper cab door's support hardware, which in turn detached from its mounting location and created a portal of ejection for Jeffery Bullock.
5. The passenger's side rear berthing access door opened during this rollover which makes the design of this door system defective in terms of rollover crashworthiness.
6. The addition of discretionary access doors to a truck's cabin, in general, makes the structure weaker, and provides another point of failure. Doors of this type should not be added to the design unless

they are thoroughly crashworthy, and do not present an additional hazard to the cabin occupants.

Def.'s Batzer Mot., ex. S at 7-8. Daimler asks the Court to prohibit Dr. Batzer from testifying as to:

1. Any opinion that Mr. Bullock was ejected from the tractor during the accident;
2. Any opinion that the sleeper cab access door was the portal of any alleged ejection;
3. Any opinion regarding the extent of Mr. Bullock's injuries in the absence of the alleged ejection;
4. Any opinion regarding any alleged defectiveness of the sleeper compartment access door or restraint system in the tractor.

Def. Daimler Trucks North America, LLC's FRCP 702 Mot. to Exclude Test. & Ops. of Dr. Stephen Batzer [Docket No. 191] ("Def.'s Batzer Mot.").

A. Evidence of Ejection

Daimler first reiterates its position, raised in its other Rule 702 motions, that there is no evidence of that Mr. Bullock was in fact ejected from the truck during the accident. However, there is at least circumstantial evidence that Mr. Bullock was ejected from the truck during the accident. Mr. Bullock was in the truck before the accident. The driver, Mr. Green, believes that Mr. Bullock was in the sleeper compartment. Following a violent collision which left an opening in the sleeper compartment doorway, Mr. Bullock was found outside of the truck. No one has testified to seeing or participating in Mr. Bullock's removal from the truck. No one has claimed that Mr. Bullock was capable, given his injuries, of getting out of the truck after the accident and moving approximately 23 feet away to where the paramedics found him. Furthermore, the earliest report from

the scene of the accident, from an unknown witness who was recorded on a 911 call, said that Mr. Bullock was outside the truck when the witness arrived. See Def.'s McCort Mot., ex. J at 16 (internal pagination at 81). Therefore, there is evidence from which it could be reasonably concluded that Mr. Bullock was ejected from the truck during the accident and Mr. Batzer's opinions are relevant to that inquiry.

B. Defectiveness of Sleep Restraint

Daimler's second argument asserts that "[p]laintiff should be precluded from presenting any testimony, discussing, or referring to the alleged defectiveness of the sleeper bunk restraint as it relates to this accident." Def.'s Batzer Mot. at 8. In the context of this argument, defendant notes that "none of Plaintiff's experts actually offers any criticism of the restraint system." Def.'s Batzer Mot. at 8. Daimler brings its motion pursuant to Federal Rule of Evidence 702, which states in its title that it addresses "Testimony by Experts." Fed. R. Evid. 702. By its own admission, Daimler's second argument does not challenge any testimony by an expert. It is not the proper subject of a Rule 702 motion and, therefore, requires no additional discussion.

C. Opinion About Bullock's Injuries

Opinion No. 2: "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."

Daimler next challenges Dr. Batzer's opinion "that '[i]t 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.'" Def.'s Batzer Mot. at 9 (citing Def.'s Batzer Mot., ex. S (Batzer

Report) at 7). Daimler challenges Dr. Batzer's qualifications to testify as to opinions regarding medical matters such as the likelihood or seriousness of a potential injury in a given situation. Daimler also argues that Dr. Batzer did not use a reliable scientific methodology or a recognized mode of inquiry to arrive at the aforementioned conclusions.

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 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.").

Dr. Batzer has extensive experience studying the effects of vehicular crashes. Part of that analysis includes an awareness of the types and seriousness associated with particular types of accidents and vehicle performance during those accidents. However, Dr. Batzer is an engineer, not a medical expert. Therefore, he is qualified to testify from an engineering perspective – i.e., focusing on engineering probabilities; he is not qualified to testify about medical probabilities. *Polston v. Boomershine Pontiac-GMC Truck, Inc.*, 952 F.2d 1304, 1309 (11th Cir. 1992) (holding that

mechanical engineer “was not qualified to testify to medical probabilities. However, as discussed above, [he] was qualified as an expert and was allowed to testify about [plaintiff’s] injuries based on a reasonable degree of engineering certainty.”).

As to his second opinion, Dr. Batzer is qualified to opine about the behavior of the truck during the accident and injuries that correlate to such behavior. However, plaintiff has not offered any qualification that would entitle him to testify as to the relative seriousness of injuries to individuals who remain inside a vehicle during an accident compared to those who are thrown out of it. His awareness of a statistic about this fact does not make him an expert.

Regardless of whether Dr. Batzer is qualified to testify as an expert on the likelihood and seriousness of Mr. Bullock’s injury in alternative scenarios, the greater problem is with the reliability of his methodology. Plaintiff describes Dr. Batzer’s opinion regarding the serious of Mr. Bullock’s injuries under alternative scenarios as follows:

Based on his inspection, Dr. Batzer believes there was sufficient occupant survival space left in the vehicle after the accident and if Mr. Bullock had not been ejected he would have survived. The basis of opinion #2 is Dr. Batzer’s knowledge through his education and experience . . . that rollovers “as a rule are not a particularly severe type of accident.” Batzer writes, “Because the kinetic energy of the moving car is dissipated over large distances, in comparison to head-on collisions, for example: the impact forces acting on the occupants are in most instances low energy, although there may be many of them.”

Pl.’s Resp. to Batzer Mot. at 11 (citations omitted). While Dr. Batzer may have a strong methodological basis for his opinions – i.e., the behavior of the vehicle and the forces acting upon it during the accident – his position weakens dramatically as he makes the final leap to predicting potential injuries. His methodology in this regard appears to be

nothing more than the fact that someone informed him of a statistic that being thrown from a vehicle in a rollover accident tends to induce greater injury. This is not a reliable basis for such an assertion. *Cf. Bitler v. A.O. Smith Corp.*, 400 F.3d 1227, 1233 (10th Cir. 2004) (“Although it is not always a straightforward exercise to disaggregate method and conclusion, when the conclusion simply does not follow from the data, a district court is free to determine that an impermissible analytical gap exists between premises and conclusion.” (citing *General Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997); *Dodge v. Cotter Corp.*, 328 F.3d 1212, 1222 (10th Cir. 2003))).

The Court also finds that, in light of the Dr. Batzer’s limited medical qualifications and the gap in his methodology, his opinion about Mr. Bullock’s injuries under alternative scenarios would not be helpful to the jury. Therefore, Dr. Batzer will be precluded from offering his second opinion – “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.”

D. “Crashworthiness” Opinions

Daimler’s next challenge is to Dr. Batzer’s third and fifth opinions, both of which discuss the crashworthiness of the truck in which Mr. Bullock was riding. His third opinion is that “[t]his vehicle was not designed and equipped with an effective rollover protection system to protect the occupants in the event of a rollover. It was not equipped with an effective sleeper berth restraint system capable of preventing ejection in a rollover event. It was not equipped with a strong roof structure to prevent

significant intrusion into the occupant survival space and failure of the rear berth access door mounting hardware.” Def.’s Batzer Mot., ex. S at 7. The fifth opinion is that “[t]he passenger’s side rear berthing access door opened during this rollover which makes the design of this door system defective in terms of rollover crashworthiness.” Def.’s Batzer Mot., ex. S at 7.

Daimler criticizes Dr. Batzer’s methodology underlying these opinions.

Specifically, Daimler argues that

[w]ith regard to his claim that the tractor is defective because it lacks an effective rollover protection system, Dr. Batzer admitted that he was not aware of any over-the-road tractor manufactured in 2003 or 2003 that incorporated a ROPS or a steel cab structure, and he made no attempt to either design or test a ROPS, much less analyze whether any such alternative design would be both feasible and reasonable in the context of overall design considerations for a Class 8 tractor. Furthermore, he admits that the tractor involved in this case satisfied all applicable government (and European) standards with regard to crashworthiness.

Def.’s Batzer Mot. at 10-11 (citations omitted). Strictly speaking, these are not criticisms of Dr. Batzer’s methodology. Instead, they attack the basis of his conclusions. As such, these arguments are more appropriately directed at the jury. *Cf. Daubert*, 509 U.S. at 596 (“Vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence.”); *Compton*, 82 F.3d at 1518, *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)).

Daimler does criticize Dr. Batzer's methodology: "Dr. Batzer obviously did not follow any scientific methodology in arriving at his crashworthiness opinions – he did not formulate a hypothesis, gather objective data, test the hypothesis, and then prove the hypothesis by repeating his analysis. Rather, he simply assumed that some part of the tractor was defective and stated his conclusions as broadly as possible under the umbrella of 'crashworthiness.'" Def.'s Batzer Mot. at 11.

In defense of Dr. Batzer, plaintiff argues that "[t]he basis of opinion #3 is Dr. Batzer's vehicle inspection and review of the documents describing and showing the results of the accident." Pl.'s Resp. to Batzer Mot. at 12. With respect to his fifth opinion, plaintiff argues that "Dr. Batzer identifies a number of regulations and standards as supporting his conclusion that the design of the door system is defective, including: ECE Regulation No. 29 5.4.2, FMVSS No. 206, SAE J839, and ECE R11. Exhibit 1, pp.7-8." Pl.'s Resp. to Batzer Mot. at 12.

Regarding Dr. Batzer's crashworthiness analysis, plaintiff also recounts the following:

Dr. Batzer opines that had this vehicle been made with a roll cage with a steel exterior such that the door had been spot welded rather than riveted in place that Mr. Bullock would have been retained in the cab in this incident. The problem in this case is that the rivets which held the door structurally attached to the cab sequentially failed allowing the door to open even though the latch stayed closed. The combination of Mr. Bullock's weight being thrown into the door and the twisting and racking of the cab as it slid along the pavement and into the guardrail are what caused the sleeper cab access door to fail.

Dr. Batzer opines that more rivets or a resistance spot welds may have kept the door from opening in this incident but even more clear is that had there been no door “there would have been no death of Mr. Bullock.” But, the most obvious alternative design that should have been employed is if you cannot design an access door that can withstand this sort of rollover there should not be a sleeper cab access door. The second alternative proposed by Dr. Batzer is to use a steel canopy in which the frame of the door is spot welded to the cab structure.

Dr. Batzer concluded in his supplemental report:

The door which was installed in this vehicle structurally weakened the cabin. It is incumbent upon Freightliner to only put doors into their vehicles that are structurally sound, and not prone to detach during accidents. The frame to cabin nearly completely “unzipped” during this accident, as the rivets sequentially failed. The reason that rivets rather than stronger resistance spot welds, were used to mount the door frame is because the structure is made of aluminum, which is not easily joined by conventional welding techniques. Aluminum is lighter and weaker than is the steel that is customarily used to manufacture passenger vehicles. If the design of crashworthy access doors is beyond the engineering expertise of Freightliner and its supplier companies, then this convenience feature should be deleted.

Pl.’s Resp. to Batzer Mot. at 13-14 (citations to record omitted).

The Court concludes that Dr. Batzer’s methodology is scientifically sound. In light of the subject matter, he performed the proper sort of testing and analysis. His conclusions logically flow from the data and the analysis, with no gaps therein. See *Bitler*, 400 F.3d at 1233. Therefore, the Court finds Dr. Batzer’s methodology with respect to his “crashworthiness” opinions to be reliable.

Furthermore, because the design of the truck and its ability to withstand accidents is directly at issue in this litigation, Dr. Batzer’s crashworthiness opinions are relevant. See *Bitler*, 400 F.3d at 1234 (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.”). As a consequence, Daimler’s Rule 702 motion is denied with respect to Dr. Batzer’s crashworthiness testimony.

IV. CONCLUSION

Based on the foregoing, it is

ORDERED that defendant Daimler Trucks North America, LLC’s Rule 702 motion to exclude certain testimony of plaintiff Amy Bullock’s expert witness, Dr. Stephen Batzer [Docket No. 191] is GRANTED in part and DENIED in part. Pursuant to Rule 702, Dr. Batzer may not testify that there is no evidence that had the Freightliner tractor been equipped with a yet undefined ROPS structure as suggested by plaintiffs expert that Mr. Bullock’s injuries would have been substantially altered. 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