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United States Court of Appeals
Tenth Circuit

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Elisabeth A. Shumaker
Clerk of Court

UNITED STATES COURT OF APPEALS

TENTH CIRCUIT

ERICA HOFFMAN; GARY HOFFMAN; SANDRA HOFFMAN,

Plaintiffs - Appellees,

v.

FORD MOTOR COMPANY, a Delaware corporation,

Defendant - Appellant.

No. 10-1137
(D.C. No. 1:07-CV-00081-REB-CBS)
(D. Colo.)

ORDER AND JUDGMENT*

Before **MURPHY**, **McKAY**, and **O'BRIEN**, Circuit Judges.

Erica Hoffman was rendered a quadriplegic from injuries she suffered as a front seat passenger in a rollover of a 1999 Ford Mercury Cougar Coupe (Cougar). She and her parents, Gary and Sandra Hoffman, (collectively, Hoffmans) sued Ford Motor Company (Ford) claiming she was wearing her seatbelt at the time of the accident but, due to a defect in its buckle, it released during the accident causing her to be ejected from

* This order and judgment is an unpublished decision, not binding precedent. 10th Cir. R. 32.1(A). Citation to unpublished decisions is not prohibited. Fed. R. App. 32.1. It is appropriate as it relates to law of the case, issue preclusion and claim preclusion. Unpublished decisions may also be cited for their persuasive value. 10th Cir. R. 32.1(A). Citation to an order and judgment must be accompanied by an appropriate parenthetical notation – (unpublished). *Id*.

the vehicle and to suffer a paralyzing spinal cord injury. To support Hoffmans' defect theory (product liability and negligent design), expert mechanical engineer Dr. Craig Good opined that Erica's seatbelt buckle "most probably" inertially unlatched[1] during the accident due to a defect in its design. (R. Vol. 2 at 304.) To reach this conclusion, he ran a series of component tests on buckles similar in design to Erica's (but not her buckle) to determine their lowest inertial unlatch threshold, i.e., the lowest level of acceleration needed to unlatch the buckle.[2] After obtaining his results he was required (as he acknowledged) "to make a comparison with data from rollover crash tests to determine if the scenarios measured in the laboratory could occur in the real world." (R. Vol. 2 at 301.) However, citing a lack of rollover crash test data, he compared his results to data from planar crash tests – ones conducted on only the horizontal plane[3] (as opposed to the considerably more dynamic and elusive forces present in a rollover) – and determined his results could occur in the real world.

Ford moved to exclude Good's testimony as unreliable and irrelevant under *Daubert v. Merrill Dow Pharms., Inc.*, 509 U.S. 579 (1993), because, *inter alia*, Good

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[1] Inertial unlatch of a seatbelt buckle occurs when vibration and shock act on the mechanism which locks the seatbelt tongue into the buckle receptacle causing the lock to disengage and release the tongue.

[2] The parties sometimes speak in terms of the amount of force necessary to cause inertial unlatch of a buckle. However, Good's tests measured the amount of acceleration needed to cause inertial unlatch. While a force causes an object's acceleration, acceleration itself measures the object's change in velocity over time. Velocity, in turn, is the rate of change of an object's displacement (position) with time. *See* Edwin R. Jones & Richard L. Childers, Contemporary College Physics at 31, 39, 96 (2d ed. 1993).

[3] Planar crashes "occur[] at any angle within the horizontal plane of the vehicle, ... includ[ing] frontal crashes." (R. Vol. 1 at 150.)

failed to demonstrate that the levels of acceleration he found necessary to cause inertial unlatch in the laboratory occurred or could have occurred on Erica's buckle in this accident. The district court denied the motion, concluding Ford had failed to show how the differences between Good's test results and real-life rollover accidents were significant. Aside from what it perceived to be Ford's failure, the court decided any deficiencies in Good's tests went to the weight, not the admissibility, of his opinions. Accordingly, at trial Good was permitted to offer his opinion that Erica's seatbelt inertially unlatched during the accident resulting in Erica's injuries. The jury found Ford liable. The district court denied Ford's subsequent motion for judgment as a matter of law or in the alternative a new trial.

In permitting Good's expert testimony to be presented to the jury the district court was not a sufficiently exacting gatekeeper; *Daubert* requires more precision. Good failed to present a scientific connection between the accelerations he found necessary to inertially unlatch buckles tested in the laboratory and accelerations that occurred or could have occurred on Erica's buckle during the rollover. As a result, his opinion (that Erica's buckle was defective because it inertially unlatched during the accident) should not have been admitted at trial.

At trial, Good changed the rationale for his opinion from that contained in his pre-trial filings. But even then he failed to make the critical connection between lab tests and real world events, a necessary ingredient to establish causation. Citing the insufficiency, Ford repeatedly moved for judgment as a matter of law or for a new trial. In rejecting Ford's motions, the court erred. Absent Good's testimony, Hoffmans' evidence was

insufficient to support the jury's verdict. Because Hoffmans had a full and fair opportunity to present their case, we reverse and remand to the district court to enter judgment in favor of Ford.

FACTUAL BACKGROUND

On the morning of March 14, 2006, Erica and her friend Shannon Cvancara, both seniors at Weld Central High School, were practicing a cheerleading routine at Shannon's house. Sometime around 12:30 p.m., they left for school, which was approximately 10 to 15 minutes from Shannon's house.[4] They went in the Cougar—Shannon in the driver's seat and Erica in the front passenger seat. As they were traveling westbound on County Road 10 (a dirt road) in Weld County, Colorado, the vehicle's right wheels went off the edge of the road. Shannon, who was traveling at or above the speed limit, responded with a hard steer to the left, sending the vehicle into a counter-clockwise spin across the road.[5] It then went off the south side of the road and began a driver's side leading roll. It

[4] The girls did not need to be to school until 1 p.m. The time of the crash is unclear. Erica testified she and Shannon left for school between 12:30 and 12:45 p.m.; Shannon said they left at approximately 12:45 p.m. Troy Nuss, the police officer who investigated the accident scene, said the crash occurred at 12:25 p.m. and he was notified of the accident at 12:32 p.m. One of the paramedics on scene testified he was dispatched to the accident scene at 12:29 p.m.; another paramedic said he departed for the accident scene at 12:45 p.m. The relevance of the time of the crash went to Ford's theory that Shannon and Erica were late for school prompting Shannon to speed.

[5] At trial, Hoffmans' accident reconstructionist estimated the vehicle was traveling 57 to 61 mph when it left the south side of County Road 10 and 47 to 50 mph when it began rolling. Shannon testified she was traveling 55 to 60 mph on Highway 65, the paved road leading to County Road 10; Erica said Shannon was going approximately 65 mph on Highway 65. Ashley Peterson (a friend of Erica's) testified to Erica having told her Shannon was going over 100 mph at the time of the accident. The speed limit of County Road 10 is 55 mph.

rolled 3½ to 4½ times down a grassy barrow ditch into a concrete irrigation ditch and landed on its roof. Shannon, secured by her seatbelt, remained in her seat and sustained only minor injuries. Erica was ejected from the vehicle and suffered a spinal cord injury rendering her a quadriplegic.

PROCEDURAL BACKGROUND

Among others,[6] Hoffmans sued Ford, the designer, manufacturer, marketer and distributor of the Cougar. They alleged negligence and strict liability.

A. Hoffmans' Seatbelt Restraint Expert – Dr. Craig Good

Hoffmans retained Dr. Craig Good, a mechanical engineer, to offer an opinion as to whether: (1) Erica was wearing her seatbelt at the onset of the rollover accident; (2) the front passenger seatbelt functioned properly and as expected throughout the rollover; and (3) safer alternative seatbelt buckle designs were available at the time the Cougar was manufactured, designs that would have prevented or reduced Erica's injuries. After examining the vehicle and the accident site, reviewing deposition testimony and other relevant documents, and running a series of tests, Good produced a report outlining his

[6] Shannon ultimately pled guilty to careless driving causing bodily injury. She settled with Hoffmans prior to the filing of the instant lawsuit. In addition to Ford, Hoffmans sued TRW Vehicle Safety Systems (TRW), who designed in part and manufactured in part components of the right-front passenger seatbelt assembly used in the Cougar. TRW settled with Hoffmans prior to trial. Ford designated Shannon and TRW as non-parties at fault. The jury ultimately found them 40 and 25 percent liable, respectively. It also attributed 10 percent fault to Erica, apparently based on an assumption of the risk theory, i.e., Erica was aware Shannon often drove above the speed limit but nevertheless chose to ride with her.

opinions.[7]

Based on, *inter alia*, a physical examination of Erica's seatbelt, Good concluded Erica was wearing it at the onset of the accident.[8] Having come to that conclusion, Good went on to opine that it must have become unlatched during the rollover in order for her to have been ejected from the vehicle. He identified three ways in which a seatbelt can become unlatched: (1) inadvertent actuation or unlatch, which occurs when in some way the occupant unintentionally presses the release button on the seatbelt buckle during an accident; (2) false latch which occurs when the seatbelt tongue only appears to be secured in the buckle receptacle but can, in fact, be removed by applying over five pounds of force and (3) inertial unlatch. Good eliminated inadvertent unlatch as the cause of the buckle failure here because its design made that difficult. He also ruled out false latch as he observed nothing to support it when he tested Erica's buckle.[9] This portion of his opinion went uncontested and is not challenged in this appeal.

To determine whether the buckle was susceptible to inertial unlatch, Good examined the seatbelt restraint system used in the Cougar. The front passenger seat is

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[7] The report was made available to Ford as provided in Rule 26, Fed. R. Civ. P.

[8] Whether she was wearing her seatbelt was hotly contested at trial. Ford does not concede the issue, but it is not directly relevant to the issue presented here. Ford does argue, however, that Good's improperly admitted opinions may have influenced the jury's decision on that point.

[9] To test for false latch, Good inserted the seatbelt's tongue into the buckle receptacle and pulled on the tongue. He did that several times; the tongue did not release. While not contained in his expert report, Good testified at trial that he tested for inadvertent unlatch by rolling a 28-millimeter ball bearing over the top of the release button. That motion did not activate the release button.

equipped with an end-release buckle, meaning the button to release the seatbelt tongue from the buckle receptacle is located at the end of the buckle. The webbing of the seatbelt is attached to the seatbelt tongue. The tongue has a hole in it. When the tongue is inserted into the buckle receptacle, a spring-loaded latch drops into the hole, locking the tongue in place. The latch itself is locked into place by tabs on the release button. If the release button is partially depressed as little as .059 inches, the latch lock is defeated. According to Good, once that lock is defeated, significant accelerations applied to the buckle may cause the latch to rise and release the tongue. He also said if sufficient acceleration causes the release button to be fully depressed (. 25 inches), ramps on the release button push the latch upward, releasing the tongue.

With that assessment in mind Good conducted two tests. The objective of the first test was to determine the test buckle's lowest vertical inertial unlatch threshold in the laboratory, i.e., the lowest amount of acceleration applied in the vertical direction needed to unlatch the buckle. Good tested eighteen buckles similar in design to Erica's buckle, which was not tested.[10] Three of the eighteen buckles were salvage buckles; the remaining buckles were new.

Good tested only the buckle, i.e., the buckle receptacle with the seatbelt tongue inserted. He did not include any seatbelt webbing (usually attached to the tongue) or the

[10] Apparently Good did some tests of Erica's buckle (*see supra* n.9), but did not use it in the acceleration tests. In their brief, Hoffmans say Good did not test the actual buckle because it had been through a serious accident and would not yield reliable results. While that may be true, they provide no record cite for their explanation and we did not uncover an explanation in our review of Good's testimony.

steel stalk which normally holds the buckle receptacle some distance from the floor so the tongue can be conveniently inserted into it. Using a shock machine, he dropped the buckles vertically onto a felted pad. The impact caused an acceleration to be applied to the buckle; Good recorded the acceleration for each drop. A total of 97 drops were performed on the eighteen buckles. The test revealed the vertical inertial unlatch threshold varied from buckle to buckle.[11] The lowest vertical unlatch threshold was 133 g.[12] However, two of the buckles did not unlatch at accelerations as high as 473 g and 516 g. Good did not test these buckles further because doing so would have entailed reassembling the shock machine for higher accelerations.

In the second test, Good used two buckles from the first test—the buckle with the lowest vertical inertial unlatch threshold (Buckle 284) and the buckle that did not unlatch at 473 g (Buckle 293). He then dropped them onto the felted pad at 15, 30 and 45 degrees from vertical (oblique angle tests). Applying the same protocol used in the first test, he determined the lowest inertial unlatch threshold of each buckle at each angle. A total of 95 drops were performed on those two buckles. Results showed intra-buckle variability. For instance, one time Buckle 284 released at 209 g when dropped at a 15

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[11] Good did not explain the variations in his Rule 26 report. At trial, however, he told the jury no two buckles are identical because there are variations in the manufacturing of their components. He admitted to conducting no analysis to determine the cause of the variations. The intrabuckle variability did, in his view, likely explain why Erica's seatbelt inertially unlatched while Shannon's did not.

[12] A "g" is the average acceleration produced by gravity at the Earth's surface (sea level). One g equals the amount of force that gravity pulls down on everything; its value is 9.907m/s^2. *See* http://www.unc.edu/~rowlett/units/dictG.html and http://physics.info/acceleration (last visited Feb. 9, 2012).

degree angle; however, on another drop at the same angle it did not release at 224 g. The results also varied between the two buckles. In the end, Good established Buckle 284's lowest inertial unlatch thresholds at 15, 30 and 45 degrees were 209 g, 146 g and 124 g, respectively. Buckle 293's thresholds were 415 g, 189 g and 149 g. From these results, he concluded the inertial unlatch thresholds of the buckles decreased as the angle increased. While acknowledging the test samples were low (two buckles), he claimed his results were consistent with data obtained from prior oblique inertial unlatch threshold tests performed by Clarke Automotive Consultants[13] on buckles sufficiently similar in design to Erica's.

After performing the tests, Good acknowledged in his Rule 26 report, "it [is] important to make a comparison with data from rollover crash tests to determine if the scenarios measured in the laboratory could occur in the real world." (R. Vol. 2 at 301.) However, because there was a lack of buckle acceleration data from real-world rollover collisions suitable for comparison, Good compared his results to data from horizontal plane crash tests (planar tests). Because (1) those tests showed peak vertical accelerations on the buckle could exceed 200 g and (2) his testing showed the subject buckle could inertially unlatch with accelerations as low as 124 g, Good concluded the subject buckle was susceptible to inertial unlatch in a reasonably anticipated rollover. Consequently, given (1) the physical evidence showing Erica was wearing her seatbelt at

[13] Good performed his acceleration tests at Clarke Automotive Consultants, which also assisted with the testing. He chose to work with them because it had the necessary equipment and had performed seatbelt buckle testing in the past.

the onset of the accident and it came unlatched during the accident and (2) ruling out the other means by which a seatbelt may become unlatched during an accident, Good concluded Erica's buckle "most probably" inertially unlatched during the rollover. (R. Vol. 2 at 304.)

Finally, Good performed tests to determine whether safer alternative seatbelt buckle designs were available at the time the Cougar was manufactured. Using a similar protocol to that used to determine the inertial unlatch thresholds for buckles similar to Erica's, Good tested buckles from a 1999 Chevy Venture, a 2000 Ford Focus, a 1994 Ford Mondeo and a 1998 Lexus LX470. These buckles, unlike Erica's, were designed with counterweights to prevent inertial unlatch. None of the buckles released during vertical shock testing with peak accelerations over 470 g. During the oblique angle testing, the buckle from the 1999 Chevy Venture released at 341 g in a 45 degree orientation. The buckles from the other vehicles did not release in a 45 degree orientation when subjected to accelerations as high as 531 g. From these results, Good concluded substantially safer alternative designs were available at the time the Cougar was manufactured and had one of these designs been used, Erica's seatbelt buckle would not have inertially unlatched.

B. Ford's *Daubert* Motion

Pursuant to *Daubert* and Rules 402, 702 and 703 of the Federal Rules of Evidence, Ford filed a motion to exclude Good's opinion. It did not challenge his qualifications as an expert in the field of seatbelt restraint systems. It did, however, argue Good's inertial unlatch opinion was unreliable and irrelevant because, as it relates to this appeal, he

failed to determine whether the levels of acceleration he found necessary to cause inertial unlatch in the laboratory occurred or could have occurred in the rollover accident. He identified several points in the accident he believed would have generated accelerations sufficient to inertially unlatch Erica's buckle but, as Ford pointed out, neither he nor Hoffmans' accident reconstruction expert performed any calculations or tests to determine the levels of acceleration being applied on the buckle at the identified points. Ford also argued that while Good claimed there was insufficient rollover data, he admitted to being aware of rollover crash tests in which the accelerations present on the buckles were measured and none of the accelerations reached 124 g, the lowest level he found necessary to cause inertial unlatch in the laboratory. Rather than rely on these tests, he compared his results to data derived from horizontal plane crash tests, but he failed to establish that the accelerations present in a planar collision have sufficient similarity to those present in this rollover or rollovers in general.

C. Hoffmans' Response to Ford's *Daubert* Motion

Hoffmans opposed Ford's *Daubert* motion. They admitted Good did not perform any calculations to determine the accelerations present on Erica's buckle during the accident, but they attached an affidavit from Good responding to each of Ford's criticisms. In it, Good maintained such calculations cannot be made after the fact with any degree of scientific certainty. The only way to determine the accelerations present during a rollover accident is to measure them with instrumentation during the rollover and there was no such instrumentation present in Shannon's vehicle at the time of the accident.

In his affidavit, Good expounded on the lack of rollover crash test data, stating the number of rollover tests conducted is "very small" because they are costly (approximately $100,000) and rollover crashes are non-repeatable events. (R. Vol. 2 at 323.) He admitted to being aware of two rollover crash tests where instrumentation was present to measure the accelerations applied to an end-release seatbelt buckle like that present in Shannon's vehicle. He conceded that none of the levels of acceleration observed in the tests exceeded the inertial unlatch thresholds identified in his laboratory tests. Good criticized these tests, however, because they were conducted by automotive manufacturers or their consultants in defense of alleged seatbelt restraint failures and the reports did not provide the information necessary to reproduce the tests or allow a full analysis by another researcher.

Acknowledging Ford's criticism of Good's use of horizontal plane crash tests results, Hoffmans noted Ford had not identified how the accelerations applied to the buckle differ between planar and rollover crashes. Moreover, they said, Ford's own seatbelt buckle specifications required buckles to resist accelerations up to 150-180 g, *a fortiori*, it admitted the buckles may experience high accelerations during a crash. Finally, they pointed out even Ford's own planar crash tests showed accelerations of 180 g might be present on the vehicle structure and Good's tests found the lowest inertial unlatch threshold of the subject buckle to be 124 g.

D. District Court's Denial of Ford's *Daubert* Motion

The district court denied Ford's *Daubert* motion. It noted that other courts addressing the phenomenon of inertial unlatch have required proof of "substantial

similarity" between the test conditions and the actual crash. (R. Vol. 2 at 408 (quotations omitted).) Reworking the substantial similarity analysis somewhat, the court identified the issue here as "whether Good's tests describe circumstances *so dissimilar* to those that might have been anticipated to occur in Erica Hoffman's accident as to be unreliable and irrelevant to the issues before the jury." (R. Vol. 2 at 409 (emphasis added).) It concluded no, reasoning:

> [O]ther than accusing Good of having concocted a 'worst case scenario' by virtue of his various testing choices, [Ford] make[s] no effort to quantify the differences between Good's laboratory results and real world rollover crashes. Stated differently, although [Ford] insist[s] that the variables [it] identif[ies] matter, [it] do[es] not show how much they matter, much less that they matter enough to completely undermine the reliability and relevance of Good's opinions such that his testimony must be excluded *in toto*. Where the test is substantial similarity, such proof clearly is relevant. Nor is this a case in which Good's testing methods are so patently inadequate that his conclusions are nothing more than rank speculation or subjective belief.[14]

(R. Vol. 2 at 409-10.) It also noted it was "unfair" for Ford to demand that Good compare his test results to evidence from rollover crashes "when it appears the limited number of rollover tests that have been conducted did not measure the acceleration forces in any event." (R. Vol. 2 at 409 n. 1.) In the end, the court determined the alleged deficiencies in Good's tests went to the weight, not the admissibility, of his opinions, and the deficiencies could be adequately addressed on cross-examination and with competing evidence.

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[14] Ford argued Good's testing was designed and conducted to prove his inertial unlatch theory rather than to impartially inquire as to whether the theory was objectively viable.

E. Trial

The trial was a battle of the experts with the key issues being whether Erica was wearing her seatbelt and, if so, whether her seatbelt released due to inertial unlatch. With respect to the second issue, in his testimony Good described the tests he performed and his results. He then attempted to link his test results to the subject accident. He informed the jury about the limited number of rollover crash tests. However, rather than rely on data from planar crash tests as he did in his Rule 26 report and supplementing affidavit, he relied on the trial testimony of Hoffmans' biomechanics expert, Dr. Mariusz Ziejewski, who testified that during a rollover accident, when the vehicle slams down on its wheels, the corners of the vehicle could experience 120 to 150 g's and the vehicle's mainframe a "couple hundred g's easily." (R. Vol. 8 at 2251.) Given these levels and because his test results showed buckles similar to Erica's could release at 124 g, Good told the jury Erica's buckle was defective because it could not withstand the levels of acceleration one would expect to be present in a rollover accident.

On cross-examination, Good admitted a key factor in his defective seatbelt opinion was that Erica's buckle was unable to withstand the accelerations expected in a rollover accident. But he conceded he did not calculate or know the accelerations present at the buckle in this case. And that was because there was no instrumentation in the vehicle at the time of the accident. He further admitted he was not aware of any rollover crash test with a seatbelted dummy and an end release buckle where inertial unlatch occurred. As to his reliance on Ziejewski's testimony that 100 to 200 g's can be present in a rollover accident, Good admitted these accelerations could reasonably be expected on the vehicle

structure during a rollover accident, but such accelerations were not necessarily present on the buckle.

To rebut Good's testimony Ford called its own seatbelt restraint expert, Michael Klima, also a mechanical engineer. He testified about laboratory tests and real-life rollovers. In doing so, he discussed the results of three different tests: (1) a rollover crash test of a 2000 Lincoln Navigator in which the maximum vertical acceleration recorded on the seatbelt buckle was 41 g; (2) a drop test (where a vehicle is dropped vertically from a certain height onto its wheels) of four vehicles in which the maximum vertical acceleration observed on a seatbelt buckle was 33 g; and (3) a drop test of a 2000 Ford Mustang at a five-degree pitch onto a concrete slab in which the maximum vertical acceleration measured on the seatbelt buckle was 70 g.[15] In none of the three tests did inertial unlatch occur. Because the accelerations recorded in these tests were lower than the 124 g Good found necessary to cause inertial unlatch in buckles similar to Erica's, Klima opined that the conditions necessary to cause inertial unlatch in a laboratory are not present in a real-life rollover accident.

On cross-examination, Klima admitted that during the rollover test involving the Lincoln Navigator an acceleration of 200 g was measured at the buckle. However, on redirect, he clarified the 200 g acceleration was lateral (side to side) and a vertical acceleration is necessary to cause inertial unlatch of an end-release buckle like Erica's

[15] The nose of the Mustang was dropped at a five degree pitch to allow the vehicle's floor pan or undercarriage to directly hit the concrete slab. The floor pan/undercarriage hit the concrete slab at a point directly below where the driver's seatbelt buckle was mounted.

because the acceleration must be "going down the axis to help try to function the buckle," i.e., "to press the [release] button." (R. Vol. 13 at 3468.) Moreover, at the time the 200 g lateral (one form of horizontal) acceleration was being applied to the buckle, the seatbelt was incurring almost 300 pounds of load (from the seatbelted dummy); according to Klima (and Good agrees) such tension decreases the likelihood of an inertial unlatch.

After a 10-day trial and 3½ days of deliberation, the jury found Hoffmans' total damages to be $18 million and that Ford was 25% at fault, resulting in a judgment of $4.5 million against Ford.

F. Ford's Rule 50 Motions and Motion for New Trial

At the conclusion of Hoffmans' evidence, Ford moved for judgment as a matter of law under Rule 50(a), Fed. R. Civ. P. The court denied the motion. When Ford renewed the motion at the close of all the evidence, the court took it under advisement. After the jury's verdict, Ford filed a motion for judgment as a matter of law pursuant to Rule 50(b), Fed. R. Civ. P. The basis for all three motions was the same – there was insufficient evidence demonstrating Erica's seatbelt buckle was defective because Good failed to show the levels of acceleration he identified in the laboratory as causing similar buckles to inertially unlatch did occur or could have occurred on Erica's buckle in the rollover. Rather, the only evidence at trial of the reasonably expected acceleration levels present on a buckle during a rollover crash came from Ford and that evidence showed the levels Good found necessary to cause inertial unlatch of buckles similar to Erica's do not occur in rollover accidents. In the alternative, Ford argued it was entitled to a new trial under Rule 59, Fed. R. Civ. P., due to the erroneous admission of Good's testimony.

Hoffmans, of course, resisted the motion. They relied on Ziejewski's testimony that the level of acceleration generated during a rollover is "a couple hundred g's easily" as well as Good's testimony that the accelerations on the vehicle floor would be amplified 1.36 to 2.37 times at the location of the buckle. Ford's own evidence also showed that 200 g's of acceleration can be generated in a rollover accident. Therefore, Hoffmans argued there was sufficient evidence Erica's buckle was defective because it could not withstand the levels of acceleration reasonably expected in a rollover crash.

The court denied Ford's motions. It entered judgment consistent with the jury's verdict.

DISCUSSION

Ford contends the district court (1) failed to perform its gatekeeper role prior to admitting Good's inertial unlatch opinion and (2) abused its discretion in admitting Good's inertial unlatch opinion at trial because the methodology he used to arrive at that opinion was neither reliable nor relevant.[16] We review de novo whether the district court

[16] Ford also argues the court erred in denying its Rule 50 motions. Because we conclude the court failed to perform its gatekeeper role and abused its discretion in admitting Good's testing, we need not address this argument. However, as we will explain, given (1) Good's failure to demonstrate at trial that the levels of acceleration he found necessary to inertially unlatch buckles similar to Erica's in the laboratory occurred or could have occurred on Erica's buckle in the rollover accident and (2) in fact, the only evidence at trial regarding the levels of acceleration present on a buckle in a rollover crash demonstrate those levels are not present, the court erred in denying Ford's Rule 50 motions because Hoffmans provided insufficient evidence that Erica's buckle was defective. *See Burrell v. Armijo*, 603 F.3d 825, 832 (10th Cir. 2010) ("A party is entitled to judgment as a matter of law only if all of the evidence, viewed in the light most favorable to the non-moving party, reveals no legally sufficient evidentiary basis to find for the non-moving party.").

applied the proper standard in performing its gatekeeper role. *Dodge v. Cotter Corp.*, 328 F.3d 1212, 1223 (10th Cir. 2003). We review the court's actual application of the standard in deciding whether to admit or exclude an expert's testimony for abuse of discretion. *Id.* "A district court abuses its discretion when it renders an arbitrary, capricious, whimsical, or manifestly unreasonable judgment." *Ralston v. Smith & Nephew Richards, Inc.*, 275 F.3d 965, 968 (10th Cir. 2001) (quotations omitted). Under the abuse of discretion standard, we will not disturb a district court's decision unless we have "a definite and firm conviction that the . . . court has made a clear error of judgment or exceeded the bounds of permissible choice in the circumstances." *Id.* at 968-69. A court's error of law, however, is always an abuse of discretion if it results in prejudice. *See Reg'l. Air Inc. v. Canal Ins. Co.*, 639 F.3d 1229, 1234 (10th Cir. 2011) ("[A] prejudicial error of law is never discretionary and so always a basis for reversal under the abuse of discretion standard of review."). Applying the above standards, we agree with both of Ford's arguments.

A. Gatekeeper Role

Rule 702 of the Federal Rules of Evidence governs the admissibility of expert testimony. *United States v. Call*, 129 F.3d 1402, 1404 (10th Cir. 1997). It states:

> 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.[17]

The rule imposes a duty on the district court to ensure expert testimony is relevant and reliable prior to admitting it. *See Daubert*, 509 U.S. at 589; *see also Dodge*, 328 F.3d at 1221. "Fulfilling the gatekeeper duty requires the judge to 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." *Goebel v. Denver & Rio Grande W. R. R. Co.*, 346 F.3d 987, 991 (10th Cir. 2003); *see also Daubert*, 509 U.S. at 592-93. While a district court is "accorded great latitude in determining how to make *Daubert* reliability findings, . . . the court must, on the record, make *some* kind of reliability determination." *United States v. Velarde*, 214 F.3d at 1204, 1209 (10th Cir. 2000). Following that determination, the court must decide whether the testimony "fits,"

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[17] Rule 702 was amended effective December 1, 2011, "as part of the restyling of the Evidence Rules to make them more easily understood and to make style and terminology consistent throughout the rules." Fed. R. Evid. 702, advisory committee's note (2011 amendments). It provides:

> A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:
>
> (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
>
> (b) the testimony is based on sufficient facts or data;
>
> (c) the testimony is the product of reliable principles and methods; and
>
> (d) the expert has reliably applied the principles and methods to the facts of the case.

The amendment is "intended to be stylistic only. There is no intent to change any result in any ruling on evidence admissibility." Fed. R. Evid. 702, advisory committee's note (2011 amendments).

in other words, whether "it involves a reliable method that would aid the jury in resolving a factual dispute." *See Bitler v. A.O. Smith Corp.*, 400 F.3d 1227, 1238 (10th Cir. 2004).

In its *Daubert* motion, Ford identified a number of deficiencies in Good's testing, which it believed rendered his inertial unlatch opinion unreliable and irrelevant. Prominently included was his failure to relate his testing to real world events. Faced with these objections, the district court was required to "adequately demonstrate by specific findings on the record that it has performed its duty as gatekeeper." *Goebel v. Denver & Rio Grande W. R. R. Co.*, 215 F.3d 1083, 1088 (10th Cir. 2000); *see also Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 149 (1999) ("[W]here [expert] testimony's factual basis, data, principles, methods, or their application are called sufficiently into question . . . the trial judge must determine whether the testimony has a reliable basis in the knowledge and experience of the relevant discipline."). "Without specific findings or discussion on the record, it is impossible on appeal to determine whether the district court carefully and meticulously reviewed the proffered scientific evidence or simply made an off-the-cuff decision to admit the expert testimony." *Goebel*, 215 F.3d at 1088 (quotations omitted).

No hearing was conducted.[18] The district court decided the *Daubert* issues on the briefs and their supporting materials. It described Good's testing and the alleged testing deficiencies but failed to determine whether any of these deficiencies undermined the reliability and relevancy of Good's inertial unlatch opinion. For instance, it noted Good

[18] Ford appears to fault the trial court for not holding a *Daubert* hearing. But it never requested one and *Daubert* does not demand one. *See Call*, 129 F.3d at 1405. Nevertheless, the district court was still required to properly perform its gatekeeping function. Its written order fails to demonstrate that it did so.

had compared his test results to data from planar crash tests rather than from rollover crash tests because there was limited rollover crash test data. It also noted Ford's objection to that comparison. However, rather than determine whether a comparison to planar crash tests is scientifically valid, the court chastised Ford for failing to show this alleged deficiency mattered and, if so, how much it mattered. It also deemed it "unfair" for Ford to demand a comparison to rollover crash test data because of the limited amount of such data. (R. Vol. 2 at 409 n.1) But a review of Ford's *Daubert* motion demonstrates it did more than simply allege this deficiency; it also explained why the deficiency rendered his testing, and in turn his inertial unlatch opinion, unreliable and irrelevant. In any event, it was not Ford's burden to show Good's inertial unlatch opinion was unreliable and irrelevant. Rather it was Hoffmans' burden to show reliability and relevancy. *United States v. Nacchio*, 555 F.3d 1234, 1241 (10th Cir. 2009) ("The proponent of expert testimony bears the burden of showing that its proffered expert's testimony is admissible."). Moreover, it was not "unfair" for Ford to demand a comparison that Good himself acknowledged (in his Rule 26 report) was necessary.

B. Reliable and Relevant

To be reliable, an expert's proffered testimony must have "a reliable basis in the knowledge and experience of his discipline." *Daubert*, 509 U.S. at 592. In making that determination, the district court must decide "whether the reasoning or methodology underlying the testimony is scientifically valid and . . . whether that reasoning or methodology properly can be applied to the facts in issue." *Id.* at 592-93. While "absolute certainty is not required," an expert's opinion "must be based on scientific

knowledge, which implies a grounding in the methods and procedures of science based on actual knowledge, not mere subjective belief or unsupported speculation." *Goebel*, 346 F.3d at 991 (quotations omitted). "Generally, the district court should focus on an expert's methodology rather than the conclusions it generates." *Id.* at 992. "However, an expert's conclusions are not immune from scrutiny: 'A court may conclude that there is simply too great an analytical gap between the data and the opinion proffered.'" *Id.* (quoting *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997)). "[N]othing in either *Daubert* or the Federal Rules of Evidence requires a district court to admit opinion evidence which is connected to existing data only by the *ipse dixit* of the expert." *Joiner*, 522 U.S. at 146.

In determining whether an expert's reasoning or methodology is valid, a court may consider: (1) whether the opinion or theory is susceptible to testing and has been subjected to such testing; (2) whether the opinion or theory has been subjected to peer review; (3) whether there is a known or potential rate of error associated with the methodology used and whether there are standards controlling the technique's operation; and (4) whether the theory has been generally accepted in the scientific community. *Daubert*, 509 U.S. at 593-94. The list is not exclusive and the inquiry is a "flexible one." *Id.* at 594. "Regardless of the specific factors at issue, the purpose of the *Daubert* inquiry is always 'to make certain that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field.'" *Dodge*, 328 F.3d at 1222-23 (quoting *Kumho Tire*, 526 U.S. at 152).

An expert's testimony must also be relevant—it must assist the fact-finder in understanding the evidence or determining a fact in issue. *Daubert*, 509 U.S. at 591. "'Relevant evidence' means evidence having any tendency to make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it would be without the evidence." Fed. R. Evid. 401. The Supreme Court has described the consideration of whether an expert's testimony is relevant as one of "fit." *Daubert*, 509 U.S. at 591. The reasoning or methodology underlying the expert's opinion must be able to be properly applied to the facts in issue. *Hollander v. Sandoz Pharm. Corp.*, 289 F.3d 1193, 1204 (10th Cir. 2002). "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." *Bitler*, 400 F.3d 1227 at 1234. "Even if an expert's proffered evidence is scientifically valid and follows appropriately reliable methodologies, it might not have sufficient bearing on the issue at hand to warrant a determination that it has relevant 'fit.'" *Id*.

For what it is worth, we do not necessarily quarrel with the tests Good performed to determine the levels of acceleration required to cause buckles similar to Erica's to unlatch in the laboratory. By testing only the buckle, Good performed a "component test[]." (R. Vol. 9 at 2438.) As Klima admitted, component testing is a valid scientific method. But Klima also testified that once a component test is performed, its results must be applied to the whole vehicle setting, i.e., one must determine how the component will behave in the vehicle setting. Good acknowledged that point in his Rule 26 report when, after obtaining the results of his tests, he explained it was "important to make a

comparison with data from rollover crash tests to determine if the scenarios measured in the laboratory could occur in the real world." (R. Vol. 2 at 301.) Merely showing that similar buckles can be made to inertially unlatch in the laboratory under certain conditions is irrelevant as to whether a buckle will inertially unlatch in a rollover **if** the laboratory conditions are not present in (or cannot be accurately and adequately related to) a rollover. Good failed to show the conditions he found necessary to inertially unlatch the buckles in the laboratory occurred or could have occurred on Erica's buckle in this accident.

At the time of his Rule 26 report, Good had not compared his test results to the accelerations present on Erica's buckle during the rollover accident or to rollover crash test data. He claimed the accelerations present on Erica's buckle during the accident could not be calculated after-the-fact and there was a lack of rollover crash test data for comparison. However, in his affidavit made in response to Ford's *Daubert* motion, Good admitted he was aware of two rollover crash tests which measured buckle accelerations and in neither test did the levels of acceleration reach the levels he identified in his testing as necessary to cause inertial unlatch. Rather than rely on the data from these tests (which did not support his inertial unlatch opinion), Good compared his results to data from horizontal plane crash tests (which did, seemingly, support his inertial unlatch opinion). But he did not say how the accelerations present in planar crash tests were similar to those present in a rollover accident or that his comparison was "scientifically sound." *Dodge*, 328 F.3d at 1222. Therefore, nowhere in his Rule 26 report did he demonstrate such comparison is scientifically valid. This lack of explanation alone

renders such comparison unreliable and irrelevant. *See, cf., Champagne Metals v. Ken-Mac Metals, Inc.*, 458 F.3d 1073, 1079 (10th Cir. 2006) (holding district court did not abuse its discretion in excluding expert's testimony where expert's opinion concerned one component of the aluminum market but his data was based on another component and he failed to explain that it was reasonable to use one component to opine on the other).

Good did not correct that deficiency in his affidavit. There, he admitted to differences between planar and rollover crashes as to the accelerations present in each. He then stated "there are characteristics of [accelerations] on buckles that will be the same for planar and rollover crashes." (R. Vol. 2 at 332.) Again, he did not explain what characteristics are the same. His conclusory statement does nothing to demonstrate how a comparison to planar crash tests is scientifically reliable and relevant to form a basis for his inertial unlatch opinion.

At the time the court ruled on Ford's *Daubert* motion, there was no scientific link between Good's tests results and those accelerations present or likely to have been present on Erica's buckle in the subject accident. Thus, his opinion was based on mere speculation or assumptions that the levels of acceleration he found necessary to inertially unlatch similar buckles in the laboratory occurred or could have occurred on Erica's buckle in the subject accident. *See, cf., Truck Ins. Exch. v. MagneTek, Inc.*, 360 F.3d 1206, 1213 (10th Cir. 2004) (concluding district court did not abuse its discretion in excluding expert opinion that a component in a light fixture caused the fire because evidence showed the component could not reach the necessary ignition temperature and

therefore expert's opinion that component started fire could have only been based on his assumption that component could reach the necessary temperature). It was an abuse of discretion to deny Ford's *Daubert* motion. Based on pretrial disclosure, Good's inertial unlatch opinion should not have been allowed in evidence at trial.

1. Harmless Error

The error in permitting Good's testimony despite the deficiencies in his Rule 26 report (as supplemented) could, conceivably, have been harmless if the deficiencies were overcome by his trial testimony (assuming there were no other pertinent objections). But that did not happen. Good's failure to compare his test results to the accelerations present on Erica's buckle in the accident or to those reasonably expected to occur on a buckle in a rollover accident was not remedied at trial.

At trial Good abandoned his reliance on horizontal plane crash tests and instead relied on Ziejewski's testimony that accelerations of 100 to 200 g could occur in a rollover accident. But, as Good admitted on cross-examination, Ziejewski's testimony concerned the accelerations expected to occur on the vehicle structure during a rollover accident, not the accelerations necessarily present on the buckle. Good did not attempt to explain why similar accelerations would be present on the buckle.

Good did testify that a study he conducted in 2006 showed that the accelerations measured at the seat base (where the seat bolts to the floor of the vehicle) were amplified by the time they reached the buckle via the seatbelt stalk by 1.4 to 2.4. But he offered no evidence as to the levels of acceleration reasonably expected to occur on a seat base during a rollover accident. Moreover, and as Good admitted, depending on where the

acceleration occurred on the vehicle structure (which Ziejewski did not clarify in his testimony), it would have to travel to the seat base. During this travel, Good conceded the acceleration could be amplified or dampened. Good presented no evidence as to what 200 g's of acceleration on the vehicle structure would be at the seat base.[19] Thus, even at trial, Good failed to link his test data to the accelerations reasonably expected to be present on a buckle during a rollover accident.

Indeed, the only evidence at trial concerning the levels of acceleration likely to be present on a buckle during a rollover accident came from Klima, Ford's expert. Klima testified the maximum vertical acceleration measured on a buckle in a rollover and slam down crash test was 41 g and 70 g, respectively. Hoffmans criticize Klima's use of drop test data because Klima admitted a drop test is not similar to an object rolling along a ditch at more than 40 mph. But Klima's testimony is not at issue; Hoffmans never sought to exclude it. In any event, Hoffmans take Klima's testimony out of context.

A drop test attempts to isolate one part of a rollover accident – when the vehicle slams down on its wheels. It also represents the moment in a rollover where seatbelt tension is at a minimum because the occupants are being pushed down into their seats, unloading their seatbelts, a condition all experts agreed is a prerequisite for inertial unlatch.[20] And Hoffmans' theory at trial was that Erica's buckle likely inertially

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[19] Klima's drop test of the Mustang onto the concrete slab had instrumentation at the seat bolt and the buckle assembly. The results indicated "that [vehicle] floor . . . amplification is not identified or viewed. There is even some degradation of the impulse, even when [the impact is] directly assaulting the floor." (R. Vol. 13 at 3370.)

[20] The experts seemed to agree that low belt tension is a prerequisite for inertial

unlatched when the vehicle slammed down on its wheels (whether one or all four) because, in that position, Erica would have been pushed down into her seat, unloading her seatbelt. Therefore, slam down testing is relevant. And both that testing and rollover testing did not reveal accelerations on the buckles at the levels Good found necessary in the laboratory to cause inertial unlatch.

Hoffmans again attempt to excuse Good's failure to compare his test results to the accelerations present in the accident or to rollover crash test data generally because the accelerations present on Erica's seatbelt buckle cannot be calculated after-the-fact and there is a dearth of rollover crash test data. We accept that the accelerations present on Erica's buckle during the accident cannot be calculated after-the-fact. We also recognize rollover crash tests are expensive to perform and, as a result, very few have been performed. But these factors do not excuse Good's failure to make the subject comparison when Good himself said such comparison is necessary. *See Truck Ins. Exch.*, 360 F.3d at 1213 (noting expert's opinion did not meet his own standards of fire investigation).

Hoffmans claim that Good did connect his testing to the actual rollover by testing the same type of buckle as the one used by Erica. But again, simply showing that the same type of buckle inertially unlatches in certain conditions in a laboratory is irrelevant without demonstrating these conditions occurred or were likely to occur in the subject accident.

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unlatch. Apparently this is due to the lack of tension on the belt web. Tension on the web increases the acceleration levels required for unlatch.

Hoffmans spend much of their brief emphasizing Good's qualifications and the evidence they presented to demonstrate that Erica was wearing her seatbelt. But Ford has never contested Good's qualifications, nor do we. And while Rule 702 requires an expert to be qualified, it also requires his opinions to be reliable and relevant. Therefore, it is not enough simply to demonstrate an expert is qualified. *See Goebel*, 346 F.3d at 992 ("It is critical that the district court determine whether the evidence is genuinely scientific, as distinct from being unscientific speculation offered by a genuine scientist.") (quotations omitted).

We assume Erica was wearing her seatbelt at the time of the accident (a fact contested at trial) and there was no dispute that Erica's seatbelt was found unlatched after the accident. Nevertheless, Hoffmans were required to prove the unlatch occurred as a result of a defect. *See Mile Hi Concrete, Inc. v. Matz*, 842 P.2d 198, 205 (Colo. 1992) ("Regardless of whether a product liability action is grounded in negligence or strict liability, a plaintiff must prove that the product was defective."); *see also Shultz v. Linden-Alimak, Inc.*, 734 P.2d 146, 148-49 (Colo. App. 1986) (stating "strict liability . . . is not the equivalent of absolute liability, and the occurrence of an accident in connection with the use of a product does not necessarily make the product defective and unreasonably dangerous"; the plaintiff must show the manufacturer's defect caused his injuries).[21] Evidence of Erica's seatbelt use, even coupled with an unexplained unlatch,

[21] In this diversity case, the substantive law of the forum state, Colorado, governs our analysis of the underlying claims. *Kansas Penn Gaming v. HV Prop. of Kan.*, 662 F.3d 1275, 1284 (10th Cir. 2011).

does not establish a defect.

Hoffmans rely on Ziejewski's testimony that the accelerations present in the subject rollover could have easily exceeded several hundred g's. As stated above, that testimony does not help because it concerned the accelerations expected to be present on the vehicle structure, not the buckle.

Finally, Hoffmans rely on Klima's testimony that accelerations as high as 150 g and 200 g can be present during a rollover. The 150 g testimony is taken out of context. During one of the drop tests testified to by Klima, an acceleration of 150 g was measured on the tire spindle. However, the acceleration measured at the buckle was only 33 g. And, as Klima explained on redirect examination, the 200 g acceleration occurred laterally, not vertically, as required to inertially unlatch an end-release buckle. Hoffmans did not rebut that testimony at trial but now claim the direction of force is irrelevant, saying:

> Because a rollover [accident] is by nature a random event in which unlatching [acceleration] can be exerted in any direction, the existence of 207 gs in the testing dispels Ford's argument regardless of the direction in which the unlatching [acceleration] occurred here. In the bouncing pattern in Klima's test, the unlatching [acceleration] happened in the lateral direction. In another random bouncing pattern, it can happen in another direction . . . .
>
> In reality, as the experts in this case testified repeatedly, rollovers are unrepeatable events; therefore, [an acceleration] that occurs in any direction in a test could also occur in a different direction depending on how the vehicle bounces along the ground during the rollover sequence.

(Appellee's Br. at 53-54.) As Ford contends, this argument is the "ipse dixit" of Hoffmans' counsel. (Appellant's Reply Br. at 11.) Hoffmans presented no expert

testimony that because a lateral acceleration of 200 g was present in a rollover crash test, that same level of acceleration could be present in a vertical direction. And the direction of the acceleration does matter. Good himself testified as much.

Hoffmans also contend that even assuming Good's testimony was improperly admitted, there was sufficient other evidence for the jury to find Erica's seatbelt buckle was defective because it inertially unlatched. They rely mainly on Ziejewski's testimony and Ford's World Wide Design Standard. Neither Ziejewski's testimony nor Ford's Worldwide Design Standard, alone or in combination, are sufficient to establish by a preponderance of the evidence that Erica's seatbelt was defective. *See Mile-Hi*, 842 P.2d at 205.

Ziejewski's expertise was limited to the field of biomechanics, i.e., the study of how the human body moves in response to forces. At trial, when asked whether he had an opinion as to whether Erica's seatbelt was defective, Ziejewski said it was defective "[f]rom [a] biomechanical perspective" because it should not have unlatched during the accident. (R. Vol. 8 at 2219.) On cross-examination, however, Ziejewski admitted he was not a seatbelt design expert, he had not reviewed any seatbelt designs or tests to reach his opinion, and his opinion that Erica's seatbelt was defective was limited to the fact it came unlatched and therefore could not offer her protection. He also said it was not his job, but that of other experts, to determine how the seatbelt unlatched. Therefore, Ziejewski's testimony could not and did not provide any evidence that Erica's buckle became unlatched due to inertial unlatch.

Ford's Worldwide Design Standard states in relevant part: "Self-release [of the

buckle] shall not occur either with the belt slack or under the influence of inertia. The buckle, when slack or under tension, shall remain closed whatever the position of the vehicle." (R. Vol. 2 at 335.) If Erica's seatbelt buckle inertially unlatched, it was not in compliance with that standard. But the premise begs the relevant question—whether Erica's seatbelt buckle did inertially unlatch due to a product defect. The Worldwide Design Standard does nothing to inform that debate.

Upon our extensive review of the record, the only evidence supporting Hoffmans' inertial unlatch theory, and therefore, that Erica's buckle was defective, was Good's testimony. Thus, the erroneous admission of his testimony was not harmless. *See Goebel*, 215 F.3d at 1089 ("Erroneous admission of evidence is harmless only if other competent evidence is sufficiently strong to permit the conclusion that the improper evidence had no effect on the decision.") (quotations omitted). This is true even assuming, as the jury obviously found, Erica was wearing her seatbelt. Further assuming the seatbelt came unlatched during the accident does not help. *Res ipsa loquitur* does not apply here. In the absence of Good's testimony, Hoffmans' evidence was insufficient. Ford's Rule 50 motions should have been granted.

C. Remedy

This leads us to determining the appropriate remedy. Ford moved in the district court for judgment as a matter of law or in the alternative a new trial. When an appellate court determines the district court is in a better position to decide whether to grant a new trial or enter judgment for the defendant, it should remand the matter to the district court for that decision. *Weisgram v. Marley Co.*, 528 U.S. 440, 444 (2000). However, when

the appellate court

> concludes that further proceedings are unwarranted because the loser on appeal has had a full and fair opportunity to present the case, including arguments for a new trial, the appellate court may appropriately instruct the district court to enter judgment against the jury-verdict winner. Appellate authority to make this determination is no less when the evidence is rendered insufficient by the removal of erroneously admitted testimony than it is when the evidence, without any deletion, is insufficient.

Id.; *see also Neely v. Martin K Eby Constr. Co.*, 386 U.S. 317, 329 (1967). A remand is unnecessary here: Ford is entitled to judgment as a matter of law.

Hoffmans were aware before and during trial that Ford contested the reliability and relevancy of Good's inertial unlatch opinion and the testing upon which it was based. They "made no attempt to add or substitute other evidence." *Weisgram*, 528 U.S. at 456. Nor have they offered specific grounds for a new trial with this Court in the event the judgment is reversed. *Id.* We acknowledge that appellees, like Hoffmans, are placed in an awkward position when, while seeking to uphold the verdict, they must also provide alternative arguments for a new trial in the event the verdict is reversed. *Id.* at 455 n.11. Nevertheless, alternative arguments are commonplace in the law and *Weisgram* and *Neely* imply, if not directly instruct, such alternative arguments are necessary in this situation. *Weisgram*, 528 U.S. at 455 n.11; *Neely*, 386 U.S. at 328-29. Here, because Hoffmans have had a "full and fair opportunity to present the case," we find it appropriate to remand with instructions for the district court to enter judgment as a matter of law for Ford. *Weisgram*, 528 U.S. at 444.

We are not unsympathetic to Erica's condition. But the law, not sympathy, guides our decision. The law requires an expert's opinion to be reliable and relevant. Good's

inertial unlatch opinion was neither.

REVERSED and **REMANDED** for entry of judgment in favor of Ford.

Entered by the Court:

Terrence L. O'Brien
United States Circuit Judge

McKAY, dissenting.

The standard which governs this appeal is the measure of deference we owe the trial court's ruling on a *Daubert* motion. Of course, it is standard fare that "we must afford *substantial deference* to the district court's application of *Daubert*." *Hollander v. Sandoz Pharm. Corp.*, 289 F.3d 1193, 1204 (10th Cir. 2002) (emphasis in original). As the Supreme Court has held, "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).

When reviewing scientific reliability in *Hollander*, after citing numerous factors to be considered, we held that "[t]he list is not exclusive, and district courts applying *Daubert* have broad discretion to consider a variety of other factors." *Hollander*, 289 F.3d at 1205. We added that "the scope of our review is quite narrow" and, further, that the proper application of our *Daubert* review "may produce a counter-intuitive effect: different courts relying on essentially the same science may reach different results." *Id.* at 1206.

While these holdings are in cases reviewing the exclusion, rather than the admission, of expert testimony, we noted in *Bitler v. A.O. Smith Corp.*, 400 F.3d 1227, 1232 (10th Cir. 2004), that "[o]ur standard of review of a trial court's factual findings in pursuit of its gatekeeping role does not vary when examining exclusion or admission of expert testimony." We further stated that, although the district court "must, on the record[,] make *some* kind of reliability determination, we recognize the wide latitude a

district court has in exercising its discretion to admit or exclude expert testimony." *Id.* (internal quotation marks and citation omitted) (emphasis in original).

In the matter of fitting the expert's tests to the facts of the case at hand, much emphasized by the majority, I note our holding in *Bitler* that "testing is not necessary in all instances to establish reliability under *Daubert*," even if further tests would establish causation to a higher degree of certainty. *Id.* at 1236. While the majority makes much of the fact that the tests of Plaintiff's expert were not an exact replication of the circumstances of the accident, *Bitler* makes clear that it is within the discretion of the trial court to conclude that tests are sufficiently similar to reasonably infer the ultimate conclusion. *Id.*

While the majority's opinion does an excellent job of cross-examining Plaintiff's expert and summing up, I cannot say I have a firm conviction that the trial court abused its broad discretion in denying Defendant's motion and admitting the testimony. I am persuaded that the trial court was well within its broad discretion when it held:

> [O]ther than accusing Good of having concocted a "worse case scenario" by virtue of his various testing choices, defendants made no effort to quantify the differences between Good's laboratory results and real world rollover crashes. Stated differently, although defendants insist that the variables they identify matter, they do not show how much they matter, much less that they matter enough to completely undermine the reliability and relevance of Good's opinions such that his testimony must be excluded *in toto*. Where the test is substantial similarity, such proof clearly is relevant. Nor is this a case in which Good's testing methods are so patently inadequate that his conclusions are nothing more than rank speculation or subjective belief.
>
> Essentially, the alleged deficiencies defendants identify go to the weight, not the admissibility of Good's expert opinions. Any alleged

shortcomings in those opinions can be more than adequately addressed by cross-examination and competing evidence.

(R. Vol. 2 at 409-10 (footnote and citations omitted).)

I would affirm the verdict in this case.