United States Court of Appeals,

Eleventh Circuit.

No. 97-8691.

Jack LINDSEY, Executor of the Estate of Grace C. Lindsey, Deceased, Jack Lindsey, as surviving spouse of Grace C. Lindsey, Deceased, Plaintiffs-Appellees,

V.

NAVISTAR INTERNATIONAL TRANSPORTATION CORP., Defendant-Appellant.

Aug. 14, 1998.

Appeal from the United States District Court for the Northern District of Georgia. 1:91-CV-1128-MHS), Marvin H. Shoob, Judge.

Before DUBINA and MARCUS, Circuit Judges, and PROPST*, Senior District Judge.

MARCUS, Circuit Judge:

Defendant-appellant Navistar International Transportation Corporation ("Navistar") appeals from a judgment for plaintiffs-appellees Jack Lindsey individually and as executor of the estate of his late wife Grace C. Lindsey, entered after a bench trial in this product liability action for damages resulting from the jackknifing of a tractor-trailer manufactured by International Harvester Company, Navistar's corporate predecessor. Navistar contends that the district court erred in finding that the tractor was defective, in concluding that the alleged defect was a proximate cause of the accident in question, and in awarding allegedly excessive damages to plaintiffs-appellees. After a thorough review, we conclude that the district court did not err and affirm its judgment.

^{*}Honorable Robert B. Propst, Senior U.S. District Judge for the Northern District of Alabama, sitting by designation.

¹Plaintiffs-appellees also originally sued International Harvester Company. Based on Navistar's acknowledgment that it had assumed the liability, if any, of International Harvester Company for the vehicle at issue, the parties filed a stipulation dismissing that defendant.

A.

The Accident

The tragic facts are simple enough. On September 5, 1989, Otis Madison was driving southbound on U.S. Highway 441 in Oconee County, Georgia, operating a Navistar tractor hauling an empty flatbed trailer. In front of Madison's truck, a vehicle had stopped while waiting to turn left onto County Road 267. Although the truck driver had at least a few hundred feet of unobstructed visibility, Madison, who was traveling at approximately sixty miles per hour and had an extensive record of speeding violations, did not begin reacting to the situation in front of him until much closer to the intersection. Had Madison's reaction been more timely, or had he been operating the truck within the posted speed limit, Madison could have brought the truck to a stop without a collision.

Unfortunately, however, when Madison finally did begin braking, he hit the brakes hard, and the rear axle locked up. The tractor started to skid, eventually crossing the center line dividing the lanes. Tommy Ballard, who was proceeding northbound on 441 and whose pickup truck was grazed along the entire left side by the tractor, described the vehicle by stating that the cab of the truck was facing "directly straight to me." A bystander whose attention was called to the wreck when he heard tires "hollering on the pavement" turned to look and saw that the tractor-trailer had jackknifed, a term used to refer to the clockwise or counter-clockwise rotation of the trailer away from the tractor. The jackknifed tractor-trailer, which had crossed the center line on a two-lane highway, smashed into Grace Lindsey, who had been driving behind Ballard going northbound on 441. Immediately after the accident, Mrs. Lindsey was moaning. She responded to questions by shaking her head, but she did not speak. An ambulance took Mrs. Lindsey to the hospital, where she died from her injuries soon thereafter. Mrs. Lindsey was thirty years old when she died. She was survived by her

husband, and two sons, who were two-and-a-half years and four months old at the time of her death.

B.

Procedural Background

Contending that the tractor involved in the accident was defective and unreasonably dangerous because the design of the brake system increased the likelihood of a "jackknifing" wreck under the foreseeable circumstances of hard braking while pulling an empty or lightly loaded trailer, plaintiffs-appellees filed suit in state court in Fulton County, Georgia. Navistar removed the case to federal court and promptly moved for summary judgment, arguing that the federal regulation pertaining to truck-braking systems, 49 C.F.R. § 571.121, preempted plaintiffs-appellees' state law tort claims. The district court granted Navistar's motion and entered judgment for Navistar. Plaintiffs-appellees appealed. Following oral argument, this Court concluded that the federal regulation did not preempt plaintiffs-appellees' state law tort claims and reversed the district court. *Myrick v. Freuhauf Corp.*, 13 F.3d 1516 (11th Cir.1994). The Supreme Court granted *certiorari*, and, on April 18, 1996, affirmed. *Freightliner Corp. v. Myrick*, 514 U.S. 280, 115 S.Ct. 1483, 131 L.Ed.2d 385 (1995).

The case then returned to the district court for further proceedings. The matter proceeded to trial, and, pursuant to the parties' stipulation, the district judge sat as the trier of fact. It was uncontested that the jackknifing occurred as a result of the rear axle locking up and the front axle not receiving enough braking power. Thus, plaintiffs-appellees argued that any one of four conditions would have prevented the lock-up of the rear axle, and thus, the accident, from occurring: the presence of antilock brakes, the absence of an automatic limiting valve, the presence of a load-sensing proportioning valve, or the presence of a manual limiting valve. An automatic limiting valve reduces the pressure, and hence the brake force, to the front axle of a tractor during certain

braking applications. Thus, plaintiffs-appellees argued that had the tractor not been equipped with an automatic limiting valve, the brake force would not have been reduced to the front axle. A load-sensing proportioning valve continuously monitors the load on each axle by measuring the deflection of the suspension. When the device detects a light load on the rear axle, it proportions more brake force to the front axle. Plaintiffs-appellees reasoned that the presence of a load-sensing proportioning valve would have detected the light load on the tractor and proportioned more brake force to the front axle. As for a manual limiting valve, the driver must adjust a lever on the dashboard to the heavily or lightly (empty) loaded position. When in the lightly loaded position, the manual limiting valve reduces the braking power to the rear axle. Plaintiffs-appellees theorized that a manual limiting valve, if switched to the empty or lightly loaded position, would have reduced the braking power to the rear axle and avoided the rear axle lock-up. After plaintiffs-appellees presented evidence regarding these four alternative designs, Navistar submitted evidence from its experts regarding each of the four proposed alternative designs.

On June 2, 1997, the district court, after taking extensive trial testimony, entered an order finding in favor of plaintiffs-appellees. Specifically, the district court concluded that although the absence of antilock brakes and/or a load-sensing proportioning valve, and/or the presence of an automatic limiting valve did not render the tractor defective, the absence of a manual limiting valve did make the truck defective. With respect to antilock brakes, the district court held that no safe, reliable antilock braking technology was compatible with American-made tractors at the time the truck in question was built. Consequently, the absence of such technology on the trailer at issue did not constitute a defect. As for the inclusion of the automatic limiting valve, the district court found that a hard brake, as employed by the driver in this case, "essentially bypasses an automatic limiting valve." As a result, "the automatic limiting valve had little or no effect on the distribution of the

braking force between front and rear axles[,]" and did not cause the accident. The district court similarly rejected plaintiffs-appellees' theory that the absence of a load-sensing proportioning valve constituted a defect in the tractor, noting that such devices do not work well with American-made vehicles; moreover, increasing the effectiveness of a load-sensing proportioning valve in American-made vehicles would require the use of air suspension, which would increase the cost of each vehicle by at least \$20,000.

The district court, however, agreed with plaintiffs-appellees that the tractor was defective because it was manufactured without a manual limiting valve. As noted, a manual limiting valve basically allows the driver to reduce the brake force to the rear wheels manually when operating a vehicle in a lightly loaded or empty condition. This adjustment prevents the rear wheels from locking up before the front wheels during a sudden stop and thus avoids the conditions that result in jackknifing. Thus, the district court reasoned that "[i]f the tractor in this case had been equipped with a manually adjustable limiting valve, which had been properly set by the driver to adjust the brakes for pulling an empty trailer, then the tractor's rear wheels would not have locked before the front wheels and the vehicle would not have jackknifed." Further finding that at the time the tractor in this case was manufactured, manual limiting valves were readily available on the American market at a cost of less than one hundred dollars per truck, the district court determined that the lack of a manual limiting valve on the tractor in question constituted a defect.

Accordingly, the district court awarded plaintiffs-appellees damages, including \$100,000 for Mrs. Lindsey's pain and suffering, \$5,000,000 for the "intangible" value of Mrs. Lindsey's life, and funeral and medical expenses in the amount of \$8,361.38, for a total award of \$5,108,361.38. Navistar appeals this judgment.

On appeal, Navistar challenges the district court's judgment in three respects: (1) Navistar contends that the district court wrongly concluded that the absence of a manual limiting valve on the tractor constituted a defect; (2) Navistar argues that the district court erred in finding that the alleged defect, the absence of the manual limiting valve, was a proximate cause of the accident; and (3) Navistar challenges the district court's award of \$5,000,000 for the "intangible" value of Mrs. Lindsey's life. We consider and reject each contention in turn.

A.

Whether the District Court Erred In Concluding that the Absence of a Manual Limiting Valve Constituted a Defect

Navistar contends that the district court's finding that the absence of a manual limiting valve constituted a design defect was in error for two reasons: first, Navistar argues that the district court improperly considered plaintiffs-appellees' manual-limiting-valve-alternative-design theory because plaintiffs-appellees allegedly failed to raise the theory until "the middle of trial," and second, Navistar contends that even if the district court did not err in considering plaintiffs-appellees' manual-limiting-valve-alternative-design theory, the absence of such a device did not constitute a design defect. We are not persuaded.

1.

We review for abuse of discretion the district court's determination to consider plaintiffs-appellees' theory that the absence of a manual limiting device constituted a design defect. *See Randolph County v. Alabama Power Co.*, 784 F.2d 1067, 1072 (11th Cir.1986), *cert. denied*, 479 U.S. 1032, 107 S.Ct. 878, 93 L.Ed.2d 833 (1987). After conducting a thorough review of the record, we conclude that the district court did not abuse its discretion in permitting plaintiffs-appellees to press their theory that the tractor was defective because it lacked a manual limiting valve.

Specifically, Navistar contends that "[f]rom the initial filing of the complaint until the middle of trial, the plaintiff's claims focused solely on the contention that Navistar should have equipped the tractor with an antilock brake system." Appellant's Br. at 2. Consequently, Navistar argues, it "had no opportunity to explore the [manual-limiting-valve or other alternative-design theories] in discovery or develop any sort of meaningful rebuttal." *Id.* at 51.

We note, however, that, unlike antilock brakes, the manual limiting valve, automatic limiting valve, and load-sensing proportioning valve all operate by re-proportioning braking power between the front and rear axles of the vehicle. And the record amply reflects repeated references by both plaintiffs-appellees and Navistar itself—the earliest of which occurred six months before trial—to the theory that the tractor was defective because it was not equipped with a device that would re-proportion the braking force in the event of a sudden stop under conditions of a lightly loaded trailer.

First, Dr. Rudy Limpert, offered by plaintiffs-appellees as an expert in accident reconstruction and vehicle braking systems, testified during his deposition *six months* before trial that Navistar's failure to better proportion braking forces between the front and rear axles rendered the tractor defective. Second, in the proposed pre-trial order, filed some five months before trial, plaintiffs-appellees' witness list referred to Dr. Limpert's opinion that "even *without* antilock brakes," the tractor should have been designed with "proper brake balance." (emphasis added). This statement unambiguously placed Navistar on notice that (a) plaintiffs-appellees intended to rely on a theory other than one resting on the absence of antilock brakes, and (b) plaintiffs-appellees' alternative design flaw theory depended on the concept that Navistar failed to employ technology that would re-proportion braking force between the axles. Indeed, even Navistar recognized that plaintiffs-appellees intended to proceed on theories other than the argument that the lack of antilock

brakes constituted a defect. In this regard, Navistar's outline of its case in the same proposed pre-trial order claimed that Navistar could not have sold its tractor if it had been equipped with antilock brakes "or greater front braking power." Moreover, Navistar's witness list stated that one of its experts, Larry Strawhorn, would testify about problems and hazards posed by "heavy front axle brake forces...." Additionally, in Navistar's trial brief, Navistar characterized plaintiffs-appellees' defect contentions to the effect that the vehicle should have had antilock brakes, or "that more power should have been allocated to the front axle brakes." Finally, approximately one week before trial, the parties joined in moving the district court to accept amendments to the pretrial order. Among the amendments was Plaintiff's Factual Summary, which stated, "The International Tractor was also defective in that the brakes were designed to allow the tractor's rear wheels to lock while the front wheels did not, thus creating the conditions which cause jackknifing." While these references to the manual limiting valve, automatic limiting valve, and load-sensing proportioning valve did not explicitly name the devices, they nonetheless plainly put Navistar on notice (1) that plaintiffs-appellees intended to go forward on a theory other than the one positing that the lack of antilock brakes caused the accident, and (2) that in poceeding in this way, plaintiffs-appellees expected to put on evidence showing that the balance of braking power (or lack of control over the braking power) between the front and rear axles caused the accident. Finally, we note that during the course of the trial, Navistar never claimed that it was surprised by plaintiffs-appellees' allegations of defect dealing with the manual limiting valve. Notably, only after the conclusion of the bench trial and before the district court ruled, did Navistar raise for the first time its objections to any contentions of defect other than the failure to provide antilock brakes. The district court considered and rejected this argument at that time. Under these circumstances, we cannot find that the district court abused its discretion in permitting plaintiffs-appellees to proceed

on their theory involving the manual limiting valve, which regulates the balance of braking power between the front and rear axles.

2.

Navistar also offers factual and legal arguments in support of its basic contention that the district court erred in concluding that the absence of a manual limiting valve constituted an actionable defect. We review for clear error the district court's factual finding that the tractor-trailer was defective. *See, e.g., Keefe v. Bahama Cruise Line, Inc.,* 867 F.2d 1318, 1321 (11th Cir.1989); *see also* Fed.R.Civ.P. Rule 52(a). "As long as the district court's findings are plausible, [the Court] may not reverse the district court even if [it] would have decided the case differently." *United States v. Engelhard Corp.,* 126 F.3d 1302, 1305 (citing *Anderson v. Bessemer City,* 470 U.S. 564, 574, 105 S.Ct. 1504, 84 L.Ed.2d 518 (1985)). To the extent that the district court's ruling that the lack of a manual limiting valve constituted a defect relies on the legal conclusion that a federal regulation identified by Navistar did not prohibit installation of manual limiting valves on American tractors at the time the vehicle in question was manufactured, we review that conclusion *de novo* because it raises a question of law. *See Reich v. Department of Conservation and Natural Resources,* 28 F.3d 1076, 1082-83 (11th Cir.1994).

Turning first to the factual issues, Georgia law, which we are bound to apply by *Erie R.R.*Co. v. Tompkins, 304 U.S. 64, 58 S.Ct. 817, 82 L.Ed. 1188 (1938), employs a risk-utility analysis in determining whether a particular design is defective. See Banks v. ICI Americas, Inc., 264 Ga. 732, 450 S.E.2d 671, 674 (1994). The risk-utility analysis, which incorporates the concept of "reasonableness" (i.e., whether the manufacturer acted reasonably in choosing a particular product design, given the probability and seriousness of the risk posed by the design, the usefulness of the product in that condition, and the burden on the manufacturer to take the necessary steps to eliminate

the risk), essentially requires the court to balance the risks inherent in a product design against the utility of the product so designed. *Id.*, 450 S.E.2d at 673-74. In performing this analysis, there is no finite set of factors to be reviewed, although the Supreme Court of Georgia has suggested several important considerations, including the following:

- 1. The usefulness of the product;
- 2. The gravity and severity of the danger posed by the design;
- 3. The likelihood of that danger;
- 4. The avoidability of the danger, *i.e.*, the user's knowledge of the product, publicity surrounding the danger, or the efficacy of warnings, as well as common knowledge and the expectation of danger;
- 5. The user's ability to avoid danger;
- 6. The state of the art at the time the product is manufactured;
- 7. The ability to eliminate danger without impairing the usefulness of the product or making it too expensive; and
- 8. The feasibility of spreading the loss in the setting of the product's price or by purchasing insurance.
- *Id.*, 450 S.E.2d at 675 n. 6. Alternative safe design factors include the following:
- 1. The feasibility of an alternative design;
- 2. The availability of an effective substitute for the product which meets the same need but is safer;
- 3. The financial cost of the improved design; and
- 4. The adverse effects from the alternative.
- *Id.* As for the benefits aspect of the balancing test, the court may also consider the appearance and aesthetic attractiveness of the product, its utility for multiple uses, the convenience and extent of its use (especially in light of the period of time it could be used without harm resulting from the product), and the collateral safety of a feature other than the one that harmed the plaintiff. *Id.*

Navistar argues that the district court did not give proper weight to certain considerations when it conducted the risk-utility analysis. Specifically, Navistar notes that proper use of the manual limiting device can reduce steerability of the truck, causing the tractor to go out of control. The district court, however, plainly considered this evidence, but rejected it, stating:

Navistar introduced evidence that truck operators in this country have long been concerned that too much brake force on the front axle may deprive them of steering control in critical situations. While this appears to be a valid consideration, the evidence was undisputed that even if a tractor's front wheels do lock up, the driver can regain steering control simply by letting up on the brakes. On the other hand, if the rear axle locks up first and the truck jackknifes, the driver has no chance of regaining control. Thus, it is not reasonable to attempt to preserve steering at the cost of causing a jackknife.

Navistar also complains that the district court erred in not fully considering the potential ill effects of a driver's failure to disengage the manual limiting valve. In particular, Navistar directs the Court's attention to an interim report by the National Highway Traffic Safety Administration ("NHTSA") that discusses manual limiting valves and states, "[I]f the driver forgets, for example, to disengage the system when the vehicle is fully loaded, premature front wheel lockup could occur on low coefficient of friction surfaces, and, if the vehicle is descending a mountain grade, front brakes could overheat." NHTSA, U.S. Dep't of Transp., No. 806 738, NHTSA Heavy Duty Vehicle Brake Research Program Report No. 1—Stopping Capability of Air Braked Vehicles Volume I: Technical Report 203 (Apr.1985) ("NHTSA Report"). The same NHTSA Report, however, also finds "significant [braking] performance improvements in all cases with the proportioning systems operational," including manually controlled proportioning systems (like the manual limiting valve). *Id.* at 198. "When there are two permissible views of the evidence, the factfinder's choice between them cannot be clearly erroneous." Anderson v. City of Bessemer, 470 U.S. 564, 574, 105 S.Ct. 1504, 84 L.Ed.2d 518 (1985). Thus, the district court did not clearly err when it found the improvement of stopping capability to outweigh the possibility that a driver might forget to deactivate the manual limiting valve and an accident might result.

Next, Navistar contends that plaintiffs-appellees presented no evidence that manual limiting valves were available in the United States at the time the tractor in issue was manufactured, and, consequently, the absence of such devices from Navistar tractors could not have constituted a defect. The record reflects, however, that Dr. Rudy Limpert, plaintiffs-appellees' expert, testified that such devices were available in the United States at a cost of less than one hundred dollars. Moreover, Navistar did not present any evidence to the contrary. Rather, Navistar argued that although manual limiting valves were used in Europe in the late 1960's and early 1970's their use was discontinued because of driver unreliability. The record reflects, however, that at about the same time use of manual limiting valves in Europe was discontinued, Europe began using a load-sensing proportioning device that automatically did what the manual limiting valve had previously done under the control of the driver. Consequently, the manual limiting devices were no longer necessary.

²On appeal, Navistar objects to the testimony offered by plaintiffs-appellees' experts, contending that plaintiffs-appellees' experts should not have been permitted to testify under *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 113 S.Ct. 2786, 125 L.Ed.2d 469 (1993). Navistar, however, failed to object to Dr. Limpert's qualifications, even when the district court ruled that Dr. Limpert was qualified as an expert in accident reconstruction and vehicle braking systems. We therefore find that Navistar waived its opportunity to object to Dr. Limpert's expert qualification. *See Carter v. DecisionOne Corp.*, 122 F.3d 997, 1004 (11th Cir.1997). Although Navistar timely objected to plaintiffs-appellees' second expert, Erik Carlsson, we need not determine whether the district court correctly overruled Navistar's objections and qualified Carlsson as an expert because Dr. Limpert also testified to all evidence attested to by Carlsson, which is now challenged by Navistar. Since Dr. Limpert's testimony supports the same points made by Carlsson and challenged by Navistar, a finding that the district court erred in qualifying Carlsson as an expert under *Daubert* would have no effect on the outcome of the case. We therefore decline to consider whether the district court properly qualified Carlsson as an expert in accordance with *Daubert* and its progeny.

³Because of the differences in design between European and American tractors, unfortunately, the load-sensing proportioning device was not financially viable in the United States at the time that it became so in Europe.

In short, the district court order reflects that the trial judge thoroughly considered all applicable *Banks* factors in ruling that the lack of the manual limiting valve constituted a defect in the Navistar tractor. Accordingly, we hold that, on this record, the district court's factual finding that the absence of the manual limiting valve constituted a defect was not clearly erroneous.

We next address Navistar's legal argument that its tractor-trailer's lack of a manual limiting valve could not have been a defect because 49 C.F.R. § 393.48 prohibited tractor-trailer makers from equipping their vehicles with manual limiting valves at the time the vehicle in question was manufactured. NHTSA, as the delegee of the Secretary of Transportation, is charged with the responsibility of regulating motor vehicle safety through the promulgation of national safety standards. *See* 49 U.S.C. § 30111(a). Similarly, the Office of Motor Carrier Safety (formerly known as the Bureau of Motor Carrier Safety ("BMCS")), also pursuant to delegation from the Secretary of Transportation, has authority to prescribe requirements for the "safety of operation and equipment" of trucks operated by motor carriers. *See* 49 U.S.C. §§ 104 & 31502(b). Standards issued by NHTSA and BMCS apply to "all employers, employees, and commercial motor vehicles, which transport property or passengers in interstate commerce." 49 C.F.R. § 390.1(a).

Navistar argues that 49 C.F.R. § 393.48, promulgated by the BMCS, "expressly addresses devices that, like the manual limiting valve at issue, reduce braking power to one axle." Navistar's Initial Br. at 37. In relevant part, that regulation provides as follows:

- (a) General rule. Except as provided in paragraphs (b) and (c) of this section, all brakes with which a motor vehicle is equipped must at all times be capable of operating.
- (b) Devices to reduce or remove front-wheel braking effort. A motor vehicle may be equipped with a device to reduce the braking effort upon its front wheels or, in the case of a three-axle truck or truck tractor manufactured before March 1, 1975, to remove the braking effort upon its front wheels, if that device conforms to, and is used in compliance with, the rules in paragraph (b)(1) or (2) of this section.
- (1) Manually operated devices. A manually operated device to reduce or remove the front-wheel

braking effort must not be-

- (i) Installed in a motor vehicle other than a bus, truck, or truck tractor; or
- (ii) Installed in a bus, truck, or truck tractor manufactured after February 28, 1975; or
- (iii) Used in the reduced mode except when the vehicle is operating under adverse conditions such as wet, snowy, or icy roads.
- (2) Automatic devices. An automatic device to reduce the front-wheel braking effort by up to 50 percent of the normal braking force, regardless of whether or not antilock system failure has occurred on any axle, must not -
- (i) Be operable by the driver except upon application of the control that activates the braking system; and
- (ii) Be operable when the pressure that transmits brake control application force exceeds [certain standards]
- (c) Towed vehicle. Paragraph (a) of this section does not apply to—[certain towed vehicles]. Referring to the regulation's exceptions to permit devices that "reduce or remove" braking force under certain circumstances, Navistar argues that the requirement that "all brakes ... must at all times be capable of operating" must be read to prohibit even devices that merely reduce braking force or re-proportion braking force between the axles, except as specified in sections (b)(1) and (b)(2) of the regulation. Because a manual limiting valve re-proportions braking force among the axles by reducing braking force to the rear axle, Navistar continues, it violates the general prohibition of the regulation and does not fall into one of the specified exceptions.

The problem with Navistar's proposed interpretation is that it reads provisions into the regulation that are not there. The plain language of the general rule merely requires that, at all times, all brakes must be "capable of operating"—that is all. It does not state that all brakes must at all times be capable of operating at their highest capacity. The manual limiting valve does not render the brakes incapable of operating; it merely re-proportions braking force between the axles by

reducing braking force to the rear axle. Indeed, the record shows that a tractor-trailer's braking system is "capable of operating" more effectively when the manual limiting device is properly employed. Moreover, section (a) plainly refers to an exception to the requirement that all brakes "must at all times be capable of operating" for the reason that section (b) discusses devices to "remove" braking power. Obviously, devices that remove braking power render brakes "[in]capable of operating." 49 C.F.R. § 393.48(a). Thus, in the absence of the language in section (a) authorizing an exception to the general rule that all brakes must at all times be "capable of operating," removal of braking force would be in direct conflict with section (a). Nor do the limitations on manually operated devices expressed in subsection (b)(1) prohibit the use of the manual limiting device. Whereas the regulation restricts the use of manually operated devices that affect the *front-wheel* braking effort, the manual limiting device works by reducing braking power to the *rear axle*.

Finally, the record suggests that even Navistar may not have found its proposed interpretation of the regulation plausible. Under Navistar's proposed construction of the regulation, all devices that reduce braking force to the *rear* axle must be prohibited because the exceptions to the general rule specified by the regulation permit reductions in braking force to the *front* axle only. At trial, however, Navistar presented evidence that it considered installing load-sensing proportioning valves in its trucks, and it now uses bobtail proportioning valves⁴ in its vehicles. Both of these devices operate like the manual limiting valve, reducing the braking force to the *rear* axle and re-proportioning the balance of the braking force. In other words, Navistar actually manufactures its vehicles equipped with devices that act in a manner they claim in this case is prohibited by the regulation at issue. Suffice it to say, we are no more persuaded by Navistar's

⁴A tractor operates "bobtail" when it runs without a trailer. A bobtail proportioning valve, which is activated by the detaching of the trailer, diminishes the amount of braking force delivered to the rear axle of the tractor.

B.

Whether the District Court Erred in Finding that the Absence of a Manual Limiting Device Was a Proximate Cause of the Accident

Having concluded that the district court did not err in finding that the lack of a manual limiting valve on the Navistar tractor constituted a defect, we now consider Navistar's argument that this defect was not a proximate cause of the accident. This Court reviews for clear error the district court's finding that the absence of a manual limiting valve proximately caused the accident. *See Sebree v. United States*, 567 F.2d 292, 294 (5th Cir.1978).

Although plaintiffs-appellees bore the burden of proving that the defect in Navistar's tractor was a proximate cause of the accident, Talley v. City Tank Corp., 158 Ga.App. 130, 279 S.E.2d 264, 269 (1981), under Georgia law there may be more than one proximate cause of an injury. Dep't of Transportation v. Blair, 220 Ga.App. 342, 469 S.E.2d 446, 448 (1996) (citing Eubanks v. Business Equip. Ctr. of Atlanta, Inc., 161 Ga.App. 202, 288 S.E.2d 273 (1982)); Brown v. Advantage Engineering, Inc., 732 F.Supp. 1163, 1172 (N.D.Ga.1990). Thus, it is not a "defense to an action for an injury resulting from negligence that the negligence of a third person contributed to cause the injury, if the negligence of the defendant was an efficient cause without which the injury would not have occurred.' " Stern v. Wyatt, 140 Ga.App. 704, 231 S.E.2d 519, 521 (1976) (citing Rollestone v. Cassirer, 3 Ga.App. 161, 59 S.E. 442 (1907); Ponder v. McKinzie, 89 Ga.App. 846, 81 S.E.2d 551, 555 (1954); Callahan v. Cofield, 61 Ga.App. 780, 7 S.E.2d 592 (1940); Buice v. Atlanta Transit System, 105 Ga.App. 795, 125 S.E.2d 795 (1962)). " "If the original negligent actor reasonably could have anticipated or foreseen the intervening act and its consequences, then the intervening act of negligence will not relieve the original actor from liability for the consequences resulting from the intervening act.' " Eubanks v. Business Equipment Center of Atlanta, Inc., 161

Ga.App. 202, 288 S.E.2d 273, 274 (1982).

In the instant case, it was reasonably foreseeable that a driver of a Navistar tractor might slam on his brakes while his trailer was empty or lightly loaded, and the record reflects that Navistar was well aware of the profound risk of jackknifing, as well as its cause, locking up of the rear axle. Indeed, Navistar does not challenge the district court's finding that the "accident occurred because the rear wheels on the Navistar tractor locked, causing the vehicle to jackknife. If the rear wheels had not locked, or if the front wheels had locked before the rear wheels locked, the vehicle would not have jackknifed and the accident would not have occurred." Nor does Navistar challenge the district court's finding that "the critical factors causing the jackknife were the sudden application of full braking force and the light load on the tractor's rear axle." Navistar similarly does not dispute the proposition that, if operated correctly, a manual limiting valve could have prevented the accident.

In apparent recognition of these facts, Navistar focuses its efforts instead on the absence of direct evidence from the driver stating that he would have activated a manual limiting valve prior to the wreck, and thus, contends that the district court could not infer that the driver would have properly used the manual limiting device, even if the truck had employed one. We find, however, that testimony from the driver that he would have used the manual limiting valve had one existed would have been altogether speculative and would have had little, if any, probative value. It is simply not reasonable to suggest that anyone could meaningfully testify regarding whether he would or would not have used a certain device about which he knew nothing at the time of the accident and with which he had no experience at the time of the accident. This, however, does not render the district court's finding of proximate cause clearly erroneous.

Rather, the district court need only have concluded, essentially as it did, that it was more

probable than not that the driver would have activated the manual limiting device. *See Page v. Atlanta Center Ltd.*, 219 Ga.App. 422, 465 S.E.2d 456 (1995) ("When a party is relying on inferences to prove a point, not only must those inferences tend in some proximate degree to establish the conclusion sought, but must also render less probable all inconsistent conclusions."). This the district court did, and the record precludes a finding that the district court committed clear error. We note that use of the manual limiting valve is not difficult. The driver must simply flip a switch from the fully loaded to the lightly loaded or empty position. As plaintiffs-appellees point out, use of the manual limiting valve is no more difficult than use of headlights, a horn, or blinkers. Indeed, it is easier. While a driver must use a horn or a blinker at the exact time that it is needed, the manual limiting valve is flipped into the lightly loaded position *before* the driver ever leaves his departure point, when the driver becomes aware that he is carrying a light load or an empty trailer. Thus, he need not think about applying the manual limiting valve at the time of the sudden stop.

Nor are we persuaded by Navistar's attempt to analogize the instant case to *Owens v. Allis-Chalmers Corp.*, 414 Mich. 413, 326 N.W.2d 372, 379 (1982). First, we note that Navistar's argument, raised for the first time in its reply brief, is untimely. *See Herman v. NationsBank Trust Co.*, 126 F.3d 1354, 1364 (11th Cir.1997), *petition for cert. filed*, 66 USLW 3774 (May 26, 1998) (citing *United States v. Coy*, 19 F.3d 629, 632 n. 7 (11th Cir.), *cert. denied*, 513 U.S. 946, 115 S.Ct. 356, 130 L.Ed.2d 310 (1994)). Second, even had Navistar made this argument at the appropriate time, it lacks merit. In *Owens*, a forklift rolled over, killing the operator. The plaintiff's estate argued that the forklift was defective because it was not equipped with a seat restraint. Other forklift operators who worked at the decedent's place of business all testified that they probably would not wear seat restraints if the forklifts were outfitted with them because the nature of their work required them to get into and out of the forklift many, many times each day. In addition to the fact that

Owens was not decided under Georgia law, it is plainly distinguishable from the case at hand. Whereas the nature of the Owens decedent's forklift duties made use of a seat restraint impractical because his job would have required him constantly throughout the day to take the belt off and put it on again, notably, a tractor-trailer driver need adjust the switch only once at the beginning of each haul to the lightly loaded or fully loaded position.

Moreover, other courts have found that the absence of a seatbelt may constitute the proximate cause of injury. In *Miller v. Varity Corp.*, 922 S.W.2d 821, 826 (Mo.Ct.App.1996), for example, the court found,

Plaintiffs' expert testified that in his opinion, within a reasonable degree of professional certainty, the decedent would have survived the roll over if the tractor he had been operating had a roll over protection system (ROPS) and decedent had been wearing a seat belt. Defendant's expert likewise admitted that if the tractor had been equipped with a ROPS and decedent had been wearing a seat belt, he would not have been crushed. It was adequate in this case for plaintiffs to show that but for the absence of the ROPS, decedent might have survived the roll over.

Thus, contrary to Navistar's implication, courts have found that the absence of optional use devices, like the manual limiting valve at issue here, can constitute proximate causes of injuries, even in the absence of testimony that the device would have been employed. In this case, without the manual limiting valve, no chance existed that the driver would use the device, and the accident was doomed to occur under the circumstances. As the district court found, had the truck been equipped with a manual limiting device, the driver would readily have had the opportunity to activate it and to prevent the accident from occurring. Particularly in view of the potential dangers of failing to use the manual limiting device, we cannot find that the district court committed clear error in concluding that it was more likely than not that the driver would have employed the manual limiting device, had one existed.

Whether the District Court Erred in Awarding \$5,000,000 for the "Intangible" Value of Mrs. Lindsey's Life

Finally, Navistar argues that the district court erred in awarding plaintiffs-appellees \$5,000,000 for the "intangible value" of Mrs. Lindsey's life. We review the district court's conclusions under the clearly erroneous standard. *See, e.g., Simmons v. Conger*, 86 F.3d 1080, 1084 (11th Cir.1996).

Navistar contends that a \$5,000,000 award solely for the intangible value of a person's life must constitute clear error because, they argue, the highest award ever approved by the Georgia appellate courts solely for the intangible value of a person's life is \$1,000,000 in Consolidated Freightways Corp. v. Futrell, 201 Ga.App. 233, 410 S.E.2d 751 (1991). We disagree. The problem with this argument is that *Futrell* merely approves an award of \$1,000,000. Except for its acknowledgment that evidence was presented regarding the character and family circumstances of the decedent, and its statement, "[W]e cannot say the jurors' verdict shocks the conscience, nor is there any clear indication the jury was biased, prejudiced or grossly mistaken[,]" 410 S.E.2d at 753, the court did not provide any explanation for its approval of the award of \$1,000,000; nor did it suggest that there was a necessary \$1 million cap on all damage awards regardless of the circumstances. Moreover, defendant-appellant does not direct the Court to any case disapproving of verdicts larger than \$1,000,000. The mere fact that the appellate courts of Georgia have apparently never been faced with verdicts greater than \$1,000,000 for the intangible value of a person's life does not necessarily mean that Georgia appellate courts would disapprove of such awards in all cases.

We further note that the district court heard testimony from several witnesses concerning Mrs. Lindsey's life. As we have previously stated, we must be especially careful about reversing findings of fact based on the district court's evaluation of live witness testimony because the district

court is "better positioned" to evaluate such evidence. *See Jean v. Nelson*, 863 F.2d 759, 767 (11th Cir.1988), *aff'd*, 496 U.S. 154, 110 S.Ct. 2316, 110 L.Ed.2d 134 (1990); *see also Henson v. Commissioner of Internal Revenue*, 835 F.2d 850, 853 (11th Cir.1988) (quoting *Anderson v. Bessemer City*, 470 U.S. 564, 575, 105 S.Ct. 1504, 84 L.Ed.2d 518 (1985)); Fed.R.Civ.P. Rule 52(a). Here, five witnesses testified regarding the details of Mrs. Lindsey's life and character. They uniformly spoke of Mrs. Lindsey as a bright, vibrant, and talented woman in the prime of her life, who was well-liked by her friends and relatives. The witnesses described the loving relationships between Mrs. Lindsey and her husband and Mrs. Lindsey and her two young sons, ages two-and-a-half years and four months—two boys who will grow up without ever really knowing their mother. While we recognize that \$5,000,000 is a significant award, in view of the circumstances, we cannot say that the district court, which heard all of the testimony and saw all of the evidence, committed *clear error* in finding that the intangible value of Mrs. Lindsey's life was \$5,000,000.

III.

We therefore conclude that, on this record, the district court did not err in finding that the lack of a manual limiting valve in the tractor-trailer in question constituted a defect which was the proximate cause of Mrs. Lindsey's death, and further, that the district court did not err in awarding \$5,000,000 for the intangible value of Mrs. Lindsey's life. Accordingly, the judgment of the district court must be, and is, AFFIRMED.