



On the Wrong Side
of the Cutting Edge

By Brett A. Ross
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As new safety technologies are continually implemented and more innovations emerge, plaintiffs' arsenal for claims will grow.

Potential Liability for Failing to Implement Technology

Most Americans do not realize just how heavily our economy relies on the trucking industry. With relatively few exceptions, most products you purchase have at one time or another been transported by truck. In 2006, the

American trucking industry hauled 69 percent of the total volume of freight transported in the United States, which equals an all-time high of 10.7 billion tons and \$645.6 billion in revenue. Tiffany Wlazowski, *Reuters Business Wire*, January 25, 2008. By 2035, the volume of freight shipped by the U.S. transportation system is expected to almost double the volume shipped in 2002. Crystal Jones, *Perspective on Freight Congestion, Public Roads* Vol. 71, No. 1 (July/August 2007). This expansion will bring more trucks to America's roads. Trucks are competing with one another and with passenger traffic for use of our nation's highways. It should come as no surprise that the trucking industry and the government are both examining ways to reduce the number of trucking accidents per mile. In the ongoing quest for a safer transportation industry, technology is playing an increasingly critical role.

Over the past decade, transportation monitoring and accident innovations have emerged. Some devices that were once only theoretical or experimental are now more

commonplace, reliable and cheap. As a result, there is increasing pressure to implement innovations throughout the commercial transportation industry. At the same time, the plaintiffs' bar has tried to capitalize on technological advances by arguing in litigation that commercial carriers could have prevented certain accidents if they had implemented a particular safety technology. As the availability of electronic transportation aids increases and the cost of implementation drops, plaintiff's arguments are likely to meet with more success than in the past. The goal of this article is to address the status of those efforts and outline existing authority to aid in combating them.

Why Plaintiffs Turn to Failure to Equip Claims

The difference between a compensatory damages case and a punitive damages case most often is whether the accident in question was caused by driver negligence or the negligence of that driver's employer. Simple, garden-variety cases involving driver error



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rarely make for noteworthy verdicts barring catastrophic injury. However, in cases where a driver's employer negligently hired, trained or retained that driver, there is potential for the plaintiff to obtain a mega-verdict. In such cases, the litigation is not about one driver against another, but about an individual accident victim against a corporation for noncompliance with applicable law, regulations or industry standards. In an effort to drive up the value of transportation cases, a failure to equip claim provides another opportunity for enterprising plaintiff's counsel to generate "heat" in what might be an otherwise innocuous trucking case. Plaintiff's counsel can argue that the defendant failed to utilize available safety devices, putting cost ahead of safety. In many ways, focusing on available safety devices converts a simple transportation negligence case into a quasi product liability case, focusing on the truck's capabilities and whether it was "state of the art" at the time of the accident.

Available Safety Devices

If an accident might have been avoided through the implementation of an available safety innovation, plaintiff's counsel may argue that the defendant failed to utilize "state of the art" safety measures. There are many different tracking and collision avoidance systems that could become the subject of that kind of liability theory. The following describes some of the more common accident avoidance devices currently in use.

Collision Avoidance Systems

Collision avoidance systems use radar, laser or video to detect forward, rear and blind spot hazards and inform the driver of those hazards. Simple systems may consist of a rear-facing sonar or a camera that shows the area behind a vehicle on a monitor in the cab. These systems are useful for identifying and avoiding backing hazards. New systems use radar frequencies that are impervious to darkness, glare or precipitation. Some systems are able to account for a vehicle turn, and effectively adjust the scan area appropriately. Radar-based systems sound an alarm and illuminate a dash-mounted warning light when following distance becomes too short, a vehicle is in the driver's blind spot, or when a driver engages his or

her turn signal if another vehicle is in his or her blind spot. Further, once the following distance reaches an adjustable limit, allowing for differences in speed, a collision avoidance system may disengage the cruise control and/or apply the brakes.

Night Vision Systems

Lighting system improvements to increase driver vision at night are limited by the concurrent need to avoid blinding other drivers on the road. Therefore, other methods of increasing driver night vision capability have been developed that do not affect the vision of other drivers. Night vision systems based on infrared technology have been developed by some manufacturers and are offered as vehicle options. Automatic warnings can be incorporated into the system, detecting pedestrians, animals and road hazards, and eliciting appropriate driver avoidance behaviors. *Exploratory Study of Early Adopters, Safety-Related Driving with Advanced Technologies*, DOT-HS-809 972 (January 2006); *NightDriver Thermal Imaging Camera and HUD Development Program for Collision Avoidance Applications*, DOT-HS-809-163 (June 2000).

Electronic Control Modules

Electronic control modules, or ECMs, (sometimes referred to as electronic data recorders, or EDRs), govern the mechanical operation of most modern trucks. The purchaser of a truck equipped with an ECM can program the onboard "governor" to prevent the operator from exceeding a set speed. In addition, the ECM can be set to record operator activity, such as engine speed, braking effort and hard-braking events, which can be very telling in reconstructing an accident. Monitoring these parameters can reveal unsafe driving practices. Moreover, ECMs can be connected to satellite communication devices which, in turn, can be programmed to report real time events that exceed the ECM's parameters, providing the carrier with instant data on a hard-braking event or speeding. While ECM technology has been around for a while, not all carriers program ECMs to utilize all of the available settings, many of which may provide tracking of driver behavior and/or vital accident information.

Lane Departure Warning Systems

Lane departure warning systems (LDWs) use a camera and specialized computer software to recognize the difference between the road and lane markings. Using continuous computer and image processing, the computer can detect when a vehicle begins to drift toward an unintentional lane change. When this occurs, LDWs will

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alert the driver via an audible alarm. The LDW is automatically switched off when the driver engages a turn signal, to reduce the number of potential false alarms.

Driver Risk Management Systems

Driver risk management systems simply monitor drivers using video and sound. Normally, recorders are triggered by the occurrence of a predetermined event, such as hard braking, swerving, or a collision. Carriers using these systems can identify risky driving behaviors and, with some systems, provide immediate feedback to a driver. The underlying operational theory of driver risk management systems is that drivers are less likely to engage in risky behavior when they know someone is watching. The systems have evolved so that cameras can be built into the rearview mirror, completely unobtrusively. Further, they can be equipped to provide the driver with a warning when activated, to alert the driver to the action that caused activation and deter similar incidents in the future.

Drowsy Driver Warning Systems

Drowsy driver warning systems use sensors capable of determining driver head position and eye closure. In addition, they can be equipped with video cameras capable

of capturing and recording video that both precedes and follows a “drowsy event.” Events can be time-stamped and recorded. The parameters that trigger an event can be programmed by the carrier and locked to prevent tampering.

General Observations on Safety Devices

The marketing strategies for the various

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safety systems described above suggest that they can provide several benefits, including reductions in at-fault collisions, property and casualty losses and workers’ compensation expenses. Some also promise to help identify at-risk drivers who engage in poor driving patterns, exceed hours of service, and put excessive wear and tear on equipment.

Regardless of the proven benefits, it is clear that as prevalence increases, implementation and/or failure to implement these safety systems will increasingly become the focus of litigation. (The Federal Motor Carrier Safety Administration’s Product Guide, addressing the potential benefits and drawbacks associated with driving safety technologies, is available at <http://www.fmcsa.dot.gov/facts-research/art-safety-tech.htm>.)

Emerging Legislation

One of the challenges plaintiff’s counsel faces in cases involving alleged failure to implement available safety innovations is the apparent lack of a duty to use such devices. One potential source that plaintiffs use to attempt to establish such a duty is emerging legislation. Some federal and state authorities may provide support to plaintiffs’ failure to implement safety innovations arguments.

Federal Legislation

Introduced in 1997 and authorized in the

1998 Transportation Equity Act for the 21st Century, the Intelligent Vehicle Initiative (IVI) had a stated mission of “prevention of highway crashes and the fatalities and injuries they cause.” The IVI sought to curtail accidents by accelerating the development of technology capable of addressing several key areas, including rear-end collision avoidance, lane change and merge collision avoidance, intersection collision avoidance, vision enhancement and vehicle stability. Although the IVI sunset in 2005, the research conducted under the initiative is currently used in the transportation industry to develop and deploy crash avoidance systems. Moreover, the U.S. Department of Transportation (DOT) continues to encourage rapid deployment of such systems in the commercial transportation industry.

Between September of 2007 and March of 2008, the DOT conducted tests on public roads using an International® 8600 heavy truck equipped with a prototype safety system. The prototype system provides forward crash warning (FCW), lane change merge (LCM), and lane departure warning (LDW) functions to address multiple crash threats. Collectively, these systems and others form the prototype: the Integrated Vehicle-Based Safety Systems (IVBSS). The objectives of the road tests were to operate the heavy truck in an uncontrolled “real-world” driving environment around Detroit. The DOT and participating industry partners analyzed the system’s susceptibility to nuisance alerts, the quality of alerts produced in crash situations and eventual system availability. Based on positive results from the road tests, it was recommended that the heavy-truck platform proceed to field-testing.

Based on the DOT’s advocacy for the development of crash avoidance systems, legislation mandating the use of such equipment is inevitable. Indeed, some of the industry’s own members advocate speedy implementation of this technology. Speaking before the House Subcommittee on Oversight and Investigations, Committee on Energy and Commerce, Maverick USA CEO Steve Williams lived up to his company’s name when he testified that Maverick has already “voluntarily invested tens of millions of dollars in virtually all of the... safety improving technologies available on the market today.” The proposed U.S. Freight and Transportation Sustainabil-

ity Initiative championed by Mr. Williams, while stopping short of mandating all such safety devices, would provide incentives to install IVBSSs and mandate electronic onboard recorders (EOBR) in all commercial trucks.

Even if the DOT were to suddenly withdraw from the development process, it appears that the implementation phase has already reached critical mass. Although no completed IVBSS systems currently exist, several vendors market and sell independent components, including infrared night vision devices, tire pressure and temperature monitoring systems, electronic log recorders, collision avoidance and warning systems and side and rearview cameras. It is likely that, at minimum, the passage of regulations mandating the use of these devices will follow the pattern established in the passenger car industry: manufacturers developed safety devices, such as air bags, and began to introduce them in model line-ups. As the devices proved worthy and prices dropped, the government mandated use. As another example, the U.S. has taken the lead in installing electronic stability control, a technology that helps prevent skids and rollovers. On April 5, 2007, the National Highway Traffic Safety Administration announced that it would make electronic stability control mandatory on all passenger cars by the 2012 model year. *The Associated Press, Systems to Prevent Rollovers to Be in All New Cars by 2012*, N.Y. TIMES, April 6, 2007. The Federal Motor Carrier Safety Administration very well may follow a similar pattern.

State Legislation

California was the first state to address the subject of electronic recording devices in vehicles. CAL. VEH. CODE §9951 (2004). California’s legislation seeks to 1) require manufacturers to disclose the existence of such recording components to consumers; 2) restrict the use of the information gathered by the recording components to those uses permitted by the owner—with limited exceptions; and 3) require any subscription service agreement that uses an automatic crash notification system to disclose that such information may be transmitted as part of the subscription service. Laura Ruhl Genson and Anita M. Kerezman, *Truck Accident Litigation* 314 (2006).

Critics of the legislation claim that it fails to protect consumers from related liability exposure. It has been argued that “drivers simply do not have an expectation of privacy for the act of driving.” *Id.* (quoting W.R. “Rusty” Haight, Analysis: EDR Technology and California Vehicle Code Section 9951, Collision Safety Institute, at <http://www.accidentreconstruction.com/newsletter/jan01/cdr.asp>). There are also inherent problems associated with attempts by unskilled or unknowledgeable persons to download information from vehicle recording devices. *Id.* Unskillful attempts to remove a recording component or download the recorded information can result in data destruction and lead to corresponding spoliation claims.

In 2005, Arkansas and North Dakota also passed legislation dealing with event data records. North Dakota’s law is similar to California’s, except it fails to address the issue of data preservation that is fundamental to balancing the data owner’s privacy with the public’s right to access the data. *Id.* Arkansas passed a more comprehensive law than either California or North Dakota. The Arkansas statute provides that the party entitled to the EDR/ECM data is the owner, which is defined as the “person or entity in whose name a motor vehicle is registered or titled; who leases a motor vehicle for at least three months, who is entitled to possession of the motor vehicle as a purchaser under a security agreement, or who is the authorized representative of the owner.” Ark. S.B. 51 (Reg. Sess. 2005) (enacted April 1, 2005). Again, however, the Arkansas legislature failed to address the fragile, private nature of information or enact measures designed to adequately preserve recorded data. Louisiana, New Jersey and Pennsylvania all have considered legislation that would require disclosure of the existence of EDR or ECM devices to consumers. La. H.B. 275 (Reg. Sess. 2004); N.J. A.B. 2090 (Reg. Sess. 2004); Pa. H.B. 2106 (Reg. Sess. 2003). However, no state has taken steps to systematically address the preservation and ownership issues that arise in liability.

Liability Issues and Defense Strategies

Where a failure to equip claim is made, there are several potential strategies to combat them.

Preemption

While it does not appear that the nation’s appellate courts have ruled on the validity of a “negligent failure to equip” case concerning available transportation technology, it is possible to draw analogies from similar cases in other litigation areas. Federal preemption is one argument that can be used by analogy from another field. In 2000, the United States Supreme Court heard the seminal preemption case, *Geier v. Am. Honda Motor Co.*, 529 U.S. 861 (2000). *Geier* focused on the 1984 version of a Federal Motor Vehicle Safety Standard (FMVSS) promulgated by the Department of Transportation under the authority of the National Traffic and Motor Vehicle Safety Act of 1966, 80 STAT. 718, 15 U.S.C. §1381 *et seq.* (1988 ed.). (Hereafter, Safety Act.) The standard, FMVSS 208, required auto manufacturers to equip some, but not all, 1987 vehicles with passive restraints. The Court addressed whether the Safety Act preempted a state, common law tort action in which the plaintiff claimed that the defendant auto manufacturer, who was in compliance with the standard, should nonetheless have equipped a 1987 automobile with air bags. The Court concluded that the Safety Act, taken together with FMVSS 208, preempted the lawsuit. However, the Court carved out a number of exceptions and heavily tailored the opinion to the particular facts presented by *Geier*.

In 1992, petitioner Alexis Geier, driving a 1987 Honda Accord, collided with a tree and was seriously injured. The car was equipped with manual shoulder and lap belts, which Geier was using at the time. The car was not equipped with air bags or other passive restraint devices. Geier sued the car’s manufacturer, Honda, under District of Columbia tort law. Geier claimed, among other things, that Honda had designed its car negligently and defectively because it lacked a driver’s side air bag. The district court dismissed the lawsuit. The court noted that FMVSS 208 gave car manufacturers a choice on whether to install air bags. The court concluded that the petitioner’s lawsuit, because it sought to establish a different safety standard—an air bag requirement—was expressly preempted by a provision of the federal act. This different standard could stand only if it was identical to a federal safety standard that was

applicable to the same aspect of performance identified by the federal act. 15 U.S.C. §1392(d) (1988 ed.); Civ. No. 95-CV-0064 (D. D.C., Dec. 9, 1997), App. 17. The court of appeals agreed with the district court’s conclusion but on somewhat different grounds. The court of appeals had doubts, given the existence of the Safety Act’s “saving clause,” 15 U.S.C. §1397(k) (1988 ed.), that

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the petitioners’ lawsuit involved the potential creation of the kind of safety standard to which the Safety Act’s express preemption provision referred. However, the court of appeals declined to resolve that question because it found that the petitioners’ state law tort claims posed an obstacle to the accomplishment of FMVSS 208’s objectives. For that reason, the court of appeals found that those claims conflicted with FMVSS 208, and that, under ordinary preemption principles, the Safety Act consequently preempted the lawsuit. 166 F.3d 1236, 1238–43 (CADC 1999).

The Supreme Court subsequently held that the particular kind of “no air bag” lawsuit presented in *Geier* conflicted with the objectives of FMVSS 208, a standard authorized by the Safety Act, and was therefore preempted by the act. However, the Court considered the Safety Act’s “saving clause,” which stated that “compliance with” a federal safety standard “does not exempt any person from any liability under common law.” 15 U.S.C. §1397(k) (1988 ed.). According to the Supreme Court, the saving clause assumed that there were a significant number of common law liability cases to save. The Court found “no convincing indication that Congress wanted to pre-empt, not only state statutes and regulations, but also

common-law tort actions, in such circumstances. Hence the broad reading cannot be correct.” Accordingly, the Supreme Court held that the language of the Safety Act’s preemption provision permitted a narrow reading that excluded common law actions. In other words the saving provision “thereby preserves those actions that seek to establish greater safety than the minimum safety

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achieved by a federal regulation intended to provide a floor. . . . Compliance with a federal safety standard does not exempt any person from any liability under common law.”

Since *Geier*, federal courts have issued opinions finding that federal regulations governing the safety of products do not necessarily preempt state tort claims. In *Monroe v. Cessna Aircraft Co.*, 417 F. Supp. 2d 824 (E.D. Tex. 2006), the plaintiffs, the personal representatives of the estates of two people killed in a plane crash, filed a wrongful death action against Cessna, alleging negligent failure to warn, negligent design and manufacture of the aircraft, and strict product liability for failure to adequately warn and inadequate design. The manufacturer moved to dismiss the complaint based on the argument that Congress preempted the entire field of aviation safety and that the personal representatives’ tort claims were barred by the Federal Aviation Act (FAA). The court concluded that the FAA did not preempt the field of aviation safety. There was insufficient evidence showing a clear intent by Congress to preempt, either through a pervasive scheme of federal regulations or from the FAA’s text and legislative history. While some courts had ruled that the FAA preempted the field of aviation safety, the U.S. Court of Appeals for the Fifth Circuit had not reached the same conclusion, and its latest ruling on the issue did not hold that the field of aviation safety was preempted or that the state

standard of care for negligence and product liability claims against aircraft manufacturers was preempted by federal law. Moreover, there was no conflict between the personal representatives’ tort claims and the applicable federal regulations such that the claims were preempted by implied conflict preemption.

The federal courts have also examined preemption issues in the context of the Motor Vehicle Safety Code. Again, the National Traffic and Motor Vehicle Safety Act was essentially recodified at 49 U.S.C. §30101 *et seq.* (Hereafter, Federal Motor Vehicles Safety Act.) The Federal Motor Vehicles Safety Act’s saving clause mirrors that of the National Traffic Act (15 U.S.C. §1397(k) (1988 ed.), providing that “[c]ompliance with a motor vehicle safety standard prescribed under this chapter does not exempt a person from liability at common law.” 49 U.S.C. §30103(e). The U.S. District Court for the Northern District of Ohio held that the statute, 49 U.S.C. §30103, did not preempt common law tort claims regarding warranty issues. In *re Ford Motor Co. Crown Victoria Police Interceptor Products Liability*, 2004 WL 1170145 (N.D. Ohio 2004). In *Ford Motor Co.*, the defendant argued that the Federal Motor Vehicles Safety Act completely preempted the plaintiffs’ claims. The plaintiffs argued that there was no basis for federal jurisdiction because all the claims were based on state statutory or common law claims, particularly, state law warranty claims. The federal district court found that “an examination of the language of the Safety Act leads to the conclusion that Congress never intended the Safety Act to completely preempt state law claims.” In light of this, the district court held that it “joins the overwhelming majority of federal courts in finding that the Federal Motor Vehicle Safety Act does not completely preempt state law causes of action . . . state statutory and common law causes of action are not completely preempted by the Federal Motor Vehicle Safety Act.”

While preemption may not appear to offer the best available defense at this time, there are sufficient similar arguments available to allow an argument. In addition, as the government becomes more involved in legislating and/or regulating the use of certain safety devices, the value of the preemption argument may grow.

Prevailing Litigation Strategy

The most frequently used tactic in attempting to establish liability for the failure to employ technology is the use by a plaintiff of a DOT safety expert to opine that the use of such technology has become standard practice in the industry, or a particular segment of the transportation industry. For example, the authors of this article have faced several such claims, including one involving the allegedly negligent failure to employ a reverse warning device. In that matter, the plaintiff’s expert noted that the defendant made frequent daily deliveries. As a package carrier, the plaintiff argued that the defendant should expect increased contact with pedestrians such as the plaintiff because of deliveries to areas that required the defendant’s drivers to back up into or out of delivery locations. As a result, the plaintiff argued that the need for reverse warning devices was greater in the package carrier segment of the industry than in the transportation industry as a whole. Moreover, the plaintiff pointed to one of the defendant’s competitors that had installed reverse warning devices fleet-wide to argue that the use of such equipment had become the norm rather than the exception. Nonetheless, the trial court concluded that because there was no requirement in existing statutory, regulatory or case law that the vehicle be equipped with a reverse warning device, here was no duty to equip the vehicle with such a device.

An industry standard argument is often most effectively offered through the use of expert testimony. Obviously, to counter an industry standard argument, the defendant will often rely on defense experts to establish that the use of such devices remains uncommon in the industry. Unfortunately, as a device becomes more prevalent, this counterargument will become increasingly difficult to make. In addition to focusing on whether an available device is in sufficient use to constitute an “industry standard,” defendants need to prepare to offer other reasons why a particular safety innovation has not been used—and preferably, reasons that are not directly related to cost.

Despite the increasing prevalence of accident avoidance technology, a large segment of the trucking industry remains reluctant to embrace such devices, for a variety of

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reasons. After interviewing industry professionals, the Federal Motor Carrier Safety Administration found that the three most common concerns associated with implementation are the accuracy and reliability of the system, cost to install and maintain the technology, and proven effectiveness of the technology to improve safety. Driver acceptance and satisfaction were also major concerns. While industry professionals overwhelmingly showed a willingness to adopt technology once it is proven effective, most apparently feel that the installation of onboard safety technologies should not be regulated, but is an individual, private business decision. *Factors in Decisions to Make, Purchase, and Use On-board Safety Technologies*, FMCSA-MCRT-06-003 (December 2005). There are numerous concerns that lead to this conclusion, most focusing

on a belief that accident avoidance technologies are ineffective and possibly even counterproductive for some professional drivers. For instance, many motor carriers do not utilize some devices because of the frequency of false positives, such as with lane departure warnings. False positives can lead to a natural tendency to ignore warnings, potentially rendering a device practically useless. In addition, if each available safety device was used, the operator space could fill with visual distractions and noise, which would distract the driver from the most effective safety measure, which is the driver's own professional judgment and techniques, or worse, create a dependence on such devices in lieu of good driving practices. Hopefully, such combined arguments can provide a defendant with adequate justification for not

using safety devices in combating failure to equip claims.

Conclusion

As new safety technologies are continually implemented and more innovations emerge, the plaintiffs' bar's arsenal for failure to equip claims will grow. While little real authority to establish a duty to implement such safety devices exists at present, industry standard arguments are frequently available. If plaintiffs succeed in establishing a duty, defendants may question the effectiveness of safety devices to justify not using them. While the tactics available to plaintiffs are largely case-specific, it is clear that the defense bar can expect to hear these arguments with increasing frequency, and most likely, as safety device availability and effectiveness improve, also with increasing success. 