



National Transportation Safety Board

Washington, D.C. 20594

Safety Recommendation

Date: March 3, 2003

In reply refer to: H-03-01 and -02

Ms. Annette M. Sandberg
Acting Administrator
Federal Motor Carrier Safety Administration
400 Seventh Street, S.W.
Washington, D.C. 20590

On Sunday, June 9, 2002, about 5:10 a.m. central daylight time, near Loraine, Texas,¹ a 1993 Motor Coach Industries (MCI) MC-12 motorcoach, operated by Greyhound Lines, Inc., (Greyhound) and occupied by the driver and 37 passengers, was traveling east on Interstate 20 (I-20), on a scheduled route from El Paso, Texas, to Abilene, Texas, at a driver-reported speed of 65 to 67 mph. A truck tractor-semitrailer, consisting of a tractor and a semitrailer leased by DelCar Trucking (DelCar), which was being operated by a driver in training with a codriver in the sleeper berth, was entering the interstate from a picnic area at a driver-estimated speed of 40 mph and proceeding into the eastbound lanes. The motorcoach collided with the rear of the semitrailer near milepost 228 of I-20, pushing the tractor-semitrailer approximately 276 feet. Three passengers on the Greyhound bus, all seated in the front of the bus, were fatally injured. Five passengers and the busdriver were seriously injured. Twenty-four passengers sustained minor injuries, and five passengers were uninjured. The truckdriver sustained a minor injury, and the codriver was uninjured.

The National Transportation Safety Board's investigation of this accident focused upon the safety and management oversight of new entrant motor carriers. DelCar had been in operation for less than 2 years at the time of the accident.

DelCar obtained interstate operating authority from the Federal Motor Carrier Safety Administration (FMCSA) on August 17, 2000, and operated for 22 months, apparently violating many Federal regulations. The carrier had no oversight other than roadside inspections, which do not examine a carrier's overall operating posture. This lack of oversight appears to be typical for new motor carriers: only 1.3 percent of new carriers (those operating less than 2 years) receive compliance reviews, while 3.4 percent of older motor carriers do. One reason for this discrepancy is the practice of conducting compliance reviews based on a motor carrier's Safety Status Measurement System (SafeStat) score, which consists of four safety evaluation areas: Accident, Vehicle, Driver, and Safety Management. Many new motor carriers, because they have yet to be audited, have neither an accident history nor a score in the Safety Management safety

¹ For more information, read: National Transportation Safety Board, *Collision of Greyhound Lines, Inc., Motorcoach and DelCar Trucking Truck Tractor-Semitrailer, June 9, 2002*, Highway Accident Report NTSB/HAR-03/01 (Washington, DC: NTSB, 2003).

evaluation area. Even if the motor carrier has high scores in the Driver and Vehicle safety evaluation areas, the composite SafeStat score places the new motor carrier in category C, which does not warrant a compliance review.

For instance, DelCar had a score of 79.23 for the Vehicle safety evaluation area and 92.69 for the Driver safety evaluation area, but was not rated in the Accident or Safety Management safety evaluation areas; therefore DelCar was placed in category C. The FMCSA probably would not have conducted a compliance review had the accident not occurred, despite DelCar's high scores in the Vehicle and Driver Safety evaluation areas. The Safety Board concludes that the current SafeStat system does not accurately reflect a new motor carrier's safety posture because the composite score is based on areas in which a new motor carrier may not be rated and therefore is unlikely to provide FMCSA inspectors enough data to determine whether a safety audit should be performed sooner rather than later.

Even as new motor carriers receive fewer compliance reviews than experienced carriers, they are more likely to be unfamiliar with the *Federal Motor Carrier Safety Regulations* (FMCSRs). Motor carriers appear to have a learning curve; their safety improves over time, probably as they become more familiar with the safety regulations and learn how to implement them.

In the case of DelCar, postaccident investigation revealed that DelCar's owner and the owner's brother, who was working at the company, displayed very limited knowledge of the FMCSRs. Although the owner certified in his application to the FMCSA (Form OP-1) that he was familiar with the Federal regulations and had a system in place to comply with them, investigators found that he did not. While the owner did have an outdated copy of the FMCSRs, he did not display any evidence during the postaccident compliance review or subsequent interviews that he understood them. Further, the carrier did not maintain any records on drivers or vehicles, did not have a drug and alcohol program in place, did not conduct background checks, and operated out of a trailer on an empty lot. The owner also knowingly dispatched the accident driver, who had only a learner's permit and no medical certificate, to drive to Michigan as part of a team. The codriver was also aware of the driver's non-commercial driver's license status and agreed to take the trip, even though he could not have supervised the accident driver and driven the truck while still getting the required hours of rest and making the trip on schedule.

In addition, DelCar's owner had been found guilty of possession of large amounts of marijuana in 1999, yet he certified, under penalty of perjury on his application to the FMCSA, that he had not been previously convicted of possession of a controlled substance. No system was in place at the FMCSA to verify whether the owner had a criminal record, even though this information was readily available to investigators after the accident. Further, Safety Board investigators learned that the brother of DelCar's owner applied for and received operating authority just prior to the accident. The brother also has a felony drug conviction. He is currently operating in DelCar's former location and employs DelCar's owner.

Because the FMCSA does not have a process in place to verify that the information submitted by new motor carrier applicants is correct, DelCar's owner was able to state in his application that he had safety systems in place, understood the FMCSRs, and had no controlled substance convictions, despite the fact that these statements were obviously not true. Even under

the current application process, this could occur. Form MCS-150A, *Safety Certification for Application for U.S. DOT Number*, required under the New Entrant Safety Assurance Process that began on January 1, 2003, does little more to screen new motor carrier applicants than the previous new entrant form requirements did. The new Form MCS-150A that must be completed only requires the carrier to check “yes” or “no” boxes. The Safety Board concludes that the FMCSA’s Form MCS-150A does not allow the FMCSA to determine a motor carrier’s level of safety fitness prior to operation because it does not require applicants to provide detailed information on operations. Further, no mechanism is in place to verify the validity of an applicant’s statements.

One way to improve the operations of new entrants is to reduce the learning curve time by educating new carriers before they begin operations. The FMCSA’s new motor carrier entrant requirements attempt to do that. Under the New Entrant Safety Assurance Process, the FMCSA has made educational and technical assistance materials available to new applicants. Although the FMCSA estimates that it will take a motor carrier operator about 1 hour to read and understand the regulations, a new motor carrier would probably need significantly more than 1 hour to attain a comprehensive understanding of them, since such an undertaking would require reading in numerous areas.

Because of the regulations’ complexity, the U.S. Department of Transportation has issued numerous interpretations to assist the public’s understanding of them. The regulations, as originally printed, are 383 pages long. A guide containing all the FMCSRs and their interpretations is 520 pages long.² One hour is inadequate for a new motor carrier entrant to fully understand the regulations and determine how they apply to the carrier’s operation. DelCar’s owner maintained a copy of the FMCSRs, yet he neither understood nor complied with a majority of the regulations.

The current application process relies on the motor carrier to read the material and do what is required. The FMCSA has no way of determining whether a motor carrier is complying with the FMCSRs until the safety audit occurs, up to 18 months after the motor carrier begins operations. In other countries and territories, the new applicant process is more stringent. In British Columbia, a new motor carrier must describe the types of systems that are in place and the records that will be kept. In all member countries of the European Union, a new motor carrier must take an examination to ensure that he knows the rules and regulations. In the United Kingdom, a new motor carrier must inform the licensing agency of its maintenance program and capabilities.

In the U.S. motor carrier certification process, no such checks are in place. The FMCSA does not verify that the motor carrier understands or has complied with the regulations. While some new motor carriers will probably put safety management systems in place to comply with the FMCSRs, the Safety Board is concerned that some carriers, such as DelCar, will fail to do so. The Safety Board therefore concludes that the FMCSA’s New Entrant Safety Assurance Process lacks meaningful safeguards to ensure that a motor carrier is aware of, understands, and has a safety management system in place to comply with the FMCSRs.

² *Code of Federal Regulations, Title 49 – Department of Transportation* (Chicago, Illinois: LabelMaster, 2002).

As written now, the requirements do not ensure that a motor carrier will comply with the regulations, nor even that the carrier understands the regulations until a safety audit is performed up to 18 months later. However, as the data indicate, new motor carriers have more pronounced patterns of critical violations of safety regulations (206.3 per 1,000 drivers for new entrants versus 11.8 for experienced carriers), far more acute violations (128.8 per 1,000 drivers for new entrants versus 34.1 for experienced carriers), and higher accident rates in the 1st year of operation (0.505 per million vehicle miles traveled versus 0.411 for those with more than 11 years of experience); consequently, the safety audit may come too late.

Once a motor carrier is granted new entrant operational authority, it can operate for up to 18 months without review of its operations. The rulemaking states that the safety audit is primarily for educational purposes, that is, to ensure that the new entrant understands the FMCSRs and has the systems and procedures in place to comply with them. The FMCSA's regulatory evaluation states that the safety benefits of this New Entrant Safety Assurance Process will result from the safety audits, which will deter more than 14,000 crashes over 10 years. But, if every new entrant carrier is to receive a safety audit before being granted full operating authority, it would be more advantageous for the FMCSA to conduct the safety audit before the motor carrier begins operation. The motor carrier can then comply with the regulations from the beginning of operation, and the FMCSA can ensure the motor carrier understands all of the regulations. This approach is likely to further reduce both the number of accidents involving new entrant motor carriers and the learning curve time that has been cited as a reason for the poorer performance of new entrant motor carriers. It may also discourage unsafe operators from seeking authority to operate in the first place.

The experience of the U.S. Department of Defense Military Traffic Management Command (MTMC), which requires prequalification inspections for new carriers, has been that those carriers that have satisfactory ratings from the FMCSA still do not understand all of the regulations and do not comply with them. In fact, 25 percent do not pass a written test of the regulations and 40 percent of those that do pass do not qualify to be a motor carrier for the military because of safety deficiencies. When MTMC began its testing and prequalification requirement, the number of motor carriers applying decreased significantly because of the more stringent criteria for carriers seeking to operate under contract to the military. British Columbia also experienced a decrease in the number of applicants when it instituted more stringent new applicant requirements.

Similarly, new motor carrier entrants applying to operate under the FMCSA's authority may not apply if they are held to more stringent requirements than filling out three forms and obtaining insurance. Although studies have shown that motor carriers have more safety violations and accidents within the 1st year of operation, the FMCSA's New Entrant Safety Assurance Process does not require new motor carriers to undergo a safety audit for 18 months.

The FMCSA could have performed a safety audit of DelCar before granting the carrier operating authority. Had it done so, the FMCSA may have detected the lack of a safety management system; deficiencies in hiring practices, maintenance, and drug and alcohol testing; and the owner's previous drug conviction. Had a safety audit taken place before DelCar began operating, the FMCSA could have used the opportunity to educate DelCar on the FMCSRs' requirements and assist the carrier in implementing the necessary management systems. The

FMCSA could have withheld operating authority unless DelCar complied with the FMCSRs. For instance, had the FMCSA required DelCar to demonstrate that it had a drug and alcohol testing program in place, the accident driver's cocaine use may have been detected or the driver may have been deterred from obtaining a job with DelCar. He might not have been permitted to drive, and the accident may not have occurred. Further, the FMCSA may have noticed deficiencies in DelCar's maintenance and driver inspection programs, and, if the carrier had upgraded its maintenance to comply with Federal requirements, the semitrailer's lighting deficiencies may have been noted and corrected, the lights may have been operational, and the semitrailer may have had retroreflective sheeting, as required, providing the busdriver with the opportunity to see the slow-moving vehicle earlier.

DelCar's owner may have believed that by virtue of being able to drive a truck, he could operate as a motor carrier. He neither understood nor complied with many of the FMCSRs that are in place to ensure safety. In fact, DelCar's owner made a false representation on his applications without detection because the FMCSA lacked a process to evaluate the validity of his statements. After the initial application, DelCar grew from 2 to 13 tractors, from 3 to 24 trailers, and from 4 to 17 drivers, none of which were under safety management oversight, further compounding the danger to the motoring public. Yet, the New Entrant Safety Assurance Process does not give the FMCSA an opportunity to evaluate the validity of applicants' statements until a safety audit occurs up to 18 months later. DelCar's situation was probably not unique, and no process is in place to ensure that the 40,000 new motor carrier applicants each year understand the safety regulations and have programs in place to comply with them. For at least 18 months or until a safety audit has been performed, the New Entrant Safety Assurance Process does nothing to prevent motor carriers such as DelCar from obtaining operating authority. In fact, DelCar, which successfully registered as a motor carrier in 2000, could do so again today under the New Entrant Safety Assurance Process without changing its qualifications or operational posture in any way.

The New Entrant Safety Assurance Process, as currently designed, does little more than make information on the requirements for operating a motor carrier more readily available to new entrants by telling new applicants how to obtain such information. While it requires that new motor carriers have a safety audit within 18 months rather than possibly wait many years for a compliance review, it does not require a preoperation evaluation. As the U.S. Department of Defense found, many carriers with even satisfactory ratings from the FMCSA fail a prequalification compliance review and performance evaluation. The Safety Board therefore concludes that the FMCSA's New Entrant Safety Assurance Process lacks meaningful safeguards to ensure that a motor carrier is aware of, understands, and has a safety management system in place to comply with the FMCSRs. The Safety Board further concludes that by conducting safety audits up to 18 months after carriers begin operation, the FMCSA potentially allows unsafe carriers to operate without oversight and without the benefit of the educational and technical assistance that the FMCSA provides during the safety audit.

To have a greater impact on new carriers' out-of-service and accident rates and on improving their safety management, the new entrant application process needs to require that new motor carriers understand the regulations and put into place systems and processes that ensure compliance with these regulations before beginning operations. The FMCSA also needs to revise its safety fitness rating system to better identify potential safety issues for new carriers.

Therefore, the National Transportation Safety Board recommends that the Federal Motor Carrier Safety Administration:

Revise the Safety Status Measurement System (SafeStat) to base scores on the Driver and Vehicle safety evaluation areas for new motor carriers, so that new motor carriers with high scores in either of these areas can be identified and will receive an immediate compliance review. (H-03-01)

Require all new motor carriers seeking operating authority to demonstrate their safety fitness *prior* to obtaining new entrant operating authority by, at a minimum: (1) passing an examination demonstrating their knowledge of the *Federal Motor Carrier Safety Regulations*; (2) submitting a comprehensive plan documenting that the motor carrier has management systems in place to ensure compliance with the *Federal Motor Carrier Safety Regulations*; and (3) passing a Federal Motor Carrier Safety Administration safety audit, including vehicle inspections. (H-03-02)

Please refer to Safety Recommendations H-03-01 and -02 in your reply. If you need additional information, you may call (202) 314-6177.

Acting Chairman HAMMERSCHMIDT and Members CARMODY and GOGLIA concurred in these recommendations.

By: John A. Hammerschmidt
Acting Chairman