

Log H-577D

NATIONAL TRANSPORTATION SAFETY BOARD

Washington, D.C. 20594



Safety Recommendation

Date: December 13, 1994

In Reply Refer To: H-94-17

Mr. John Cornell
Cornell Construction Company, Inc.
Post Office Box 189
Clinton, Oklahoma 73601

About 3:28 p.m. on November 10, 1993, near Snyder, Oklahoma, a tractor-semitrailer traveling southbound on U.S. Route 183 struck a 1993 Thomas Built Minotour school bus that was crossing the highway while traveling west on County Line Road. The 20-passenger school bus was occupied by the driver and nine children. The school busdriver said that she stopped at the stop sign and then proceeded to drive across Route 183. The truckdriver stated that the school busdriver hesitated and then pulled out in front of his truck. The school bus was struck in the right side behind the right-front entrance door. Eight children were not wearing the available lapbelts and were ejected. Four of the ejected children died; the injuries of the other four ranged from minor to serious. One child, the only occupant of the bus who was restrained, was not ejected; he received minor injuries. The school busdriver was not ejected, but she was not wearing the lap-shoulder restraint and sustained severe injuries from contact with various parts of the bus interior. The truckdriver, who stated that he was wearing his lapbelt, received minor injuries.¹

¹ For more detailed information, read Highway Accident Report--*Collision of School Bus with Tractor-Semitrailer near Snyder, Oklahoma, November 10, 1993* (NTSB/HAR-94-04).

National Transportation Safety Board investigators conducted a postaccident mechanical inspection of the combination unit, which was owned by Cornell Construction Company, Inc. (Cornell). The inspection revealed that four of the six brakes on the tractor and three of the four brakes on the semitrailer were out of adjustment. The investigators also found other defects in the braking system. The S-cam rollers on the brakes on axle 1 had an accumulation of dirt and grease. The brake drums on axle 2 had moderate heat-checking² and a 3/8-inch lip between the friction surfaces and the outer edges. A drag test demonstrated that the brake on the right side of axle 2 would not lock the wheel. The brake drum on the left side of axle 3 had minor heat-checking, and the lining on the brakeshoe had a transverse crack that extended from rivet hole to rivet hole. The brake drum on the right side of axle 3 had light heat-checking, and the lining had cracks on both sides. The Safety Board concludes that if the truck brakes had been properly adjusted, the impact forces would have been lower and the crash forces transmitted to the occupants would have been less severe.

Maintenance records on the semitrailer in the accident showed that on May 18, 1993, the suspension system was repaired; on October 15, 1993, the brakeshoes were replaced on the right-rear brake, a wheel seal and brake kit were installed, and the brakes were adjusted. No other records were available for the semitrailer. Records for the tractor indicate that the wiring on the starter was repaired on June 11, 1993. The Cornell vice president stated that much more maintenance had been performed on the tractor but had not been documented. He said he believes that on October 15, 1993, when the semitrailer's brakes were adjusted, the tractor's brakes were adjusted as well. The vice president also told Safety Board investigators that the brakes on Cornell trucks were adjusted on an "as needed" basis and that such work was often postponed until construction projects were completed. Federal Motor Carrier Safety Regulations (FMCSR)³ require that:

49 CFR Part 396.3--Inspection, repair, and maintenance. Every motor carrier shall systematically inspect, repair, and maintain, or cause to be systematically inspected, repaired, and maintained, all motor vehicles subject to its control.

49 CFR Part 396.21--Periodic inspection recordkeeping requirements. The original or a copy of the inspection report shall be retained by the motor carrier or other entity who is responsible for the inspection for a period of fourteen months from the date of the inspection report. The original or a copy of the inspection report shall be retained where the vehicle is either housed or maintained. The original or a copy of the inspection report shall

² Small lines indicating that the brakes had been subjected to extreme heat; heat-checking is usually evidence of emergency braking.

³ In 1986, Oklahoma adopted most of the FMCSR, including the sections quoted here, in Oklahoma statute Title 47, Section 230.5.

be available for inspection upon demand of an authorized Federal, State, or local official.

During the 10 years preceding the accident, the truckdriver in this accident had received 33 speeding citations in 4 States, many of them while driving a commercial motor vehicle (CMV). His traffic record in Oklahoma for the past 10 years showed 27 convictions for speeding and 6 convictions for other violations: operating an overweight vehicle, failing to stop for a red light, driving the wrong way on a one-way street, operating a motor vehicle without a current license plate, and driving while suspended (twice). His traffic record in Wyoming showed six speeding convictions that had been issued in Oklahoma, Texas, and Kansas between January 1990 and October 1991. Between July 1990 and March 1992, Wyoming suspended his license twice and disqualified him from driving a CMV. The truckdriver provided a Texas commercial driver's license (CDL) when he was hired by Cornell in October 1992. His license status in Texas was clear at that time, but if Cornell personnel had requested his traffic records from Oklahoma or Wyoming, they would have found his extensive list of violations. Furthermore, Texas revoked the truckdriver's CDL for serious offenses⁴ after he began working for Cornell, and it was still revoked at the time of this accident.

Cornell's files on the truckdriver included a "Motor Vehicle Certification of Violations" form, which noted a \$32 fine for one seatbelt violation in a passenger car in February 1993. The truckdriver knew about his record, but he had signed this form, thus certifying "that the following is a true and complete list of traffic violations (other than parking violations) for which I have been convicted or forfeited bond or collateral during the past 12 months." The form was dated October 1992, the month the truckdriver was hired. This accident demonstrates again the unreliability of a self-reporting system for drivers. A driver who has accumulated numerous violations or suspensions is unlikely to risk loss of employment by reporting them to a carrier.

The Safety Board considers the truckdriver's driving record pertinent to this accident. The combination unit was 58 feet long and 8 feet wide. At the time of the accident, the semitrailer was carrying 31,980 pounds of crushed granite, and the estimated weight of the tractor and its loaded semitrailer was 66,500 pounds. The truckdriver stated that he was in 12th gear and estimated his speed at the time of the accident to be between 55 and 60 mph. The speed limit on the highway is 55 mph, but a speed advisory of 45 mph was posted for the section of Route 183 under construction. The Safety Board concludes that the truckdriver did not have sufficient time to avoid the collision. However, the Board also concludes that if the truckdriver had been traveling at the 45 mph advisory speed, the impact forces would have been lower and the crash forces transmitted to the occupants would have been less severe.

Between September 1989 and September 1993, officers from the Oklahoma Motor Carrier Safety Assistance Program (MCSAP) conducted 33 roadside inspections of Cornell

⁴ According to the Commercial Motor Vehicle Safety Act passed by Congress on October 26, 1986, any speed exceeding the posted limit by 15 mph or more constitutes a serious violation for a CMV.

vehicles and found 167 driver and vehicle violations. (Two of these roadside inspections--one in March 1993 and one in April 1993--involved the truckdriver in the accident.) Although MCSAP personnel issued citations and levied fines, Cornell seemed unresponsive because violations previously identified were continually repeated.

As a result of its investigation, the Safety Board concludes that Cornell Construction Company failed to systematically maintain the accident truck and to ensure that the truckdriver had a valid CDL. Therefore, the National Transportation Safety Board recommends that the Cornell Construction Company:

Establish a systematic vehicle-maintenance and driver-oversight program that complies with Federal or State Motor Carrier Safety Regulations. (Class II, Priority Action) (H-94-17)

The Safety Board also issued Safety Recommendations H-94-10 and -11 to the National Highway Traffic Safety Administration, H-94-12 to the Federal Highway Administration, H-94-13 and -14 to the Governors of the 50 States and the mayor of the District of Columbia), and H-94-15 and -16 to the National Association of State Directors of Pupil Transportation Service.

The National Transportation Safety Board is an independent Federal agency with the statutory responsibility "to promote transportation safety by conducting independent accident investigations and by formulating safety improvement recommendations" (Public Law 93-633). The Safety Board is vitally interested in any action taken as a result of its safety recommendations. Therefore, it would appreciate a response from you regarding action taken or contemplated with respect to the recommendation in this letter. Please refer to Safety Recommendation H-94-17 in your reply. If you need additional information, you may call (202) 382-6850.

Chairman HALL and Members LAUBER and HAMMERSCHMIDT concurred in this recommendation.

By: 
Jim Hall
Chairman