

SP-20  
H-447

NATIONAL TRANSPORTATION SAFETY BOARD  
WASHINGTON, D.C.

ISSUED: September 10, 1985

Forwarded to:

Honorable Ray Barnhardt  
Administrator  
Federal Highway Administration  
U. S. Department of Transportation  
Washington, D.C. 20590

SAFETY RECOMMENDATION(S)

H-85-20 and-21

About 12:50 a.m. on July 18, 1984, a 1976 intercity bus, operated by Denver, Colorado Springs, and Pueblo Motorway, Inc., (DCS&P) struck the rear of a loaded 1981 tractor-flatbed semitrailer, operated by American Colloid Carrier Corporation, in the right lane of northbound Interstate 25 about 3 miles south of Cheyenne, Wyoming. The estimated vehicle speeds were 65 to 75 mph for the bus and 55 mph for the truck. Both vehicles remained jammed together as they came to rest upright in the right lane. It was dark, the weather was clear, and the pavement of the four-lane, divided highway was dry. Of the 11 bus passengers, 1 passenger was killed, 1 passenger sustained moderate injuries, and 9 passengers received minor injuries. The busdriver was injured seriously, and the truckdriver sustained minor injuries. The truckdriver's wife, who was in the sleeper berth of the truck tractor at the time of the collision, was not injured. 1/

The busdriver held a valid Colorado driver license, which permitted him to operate intercity buses with no restrictions. He had been a part-time busdriver for about 8 years. His medical examiner's certificate, which he obtained 2 days before the accident, showed that he was physically qualified to operate commercial vehicles in interstate commerce.

The busdriver worked for three employers in the Denver, Colorado, area. He was employed as a full-time firefighter by the Air National Guard, as a part-time busdriver by DCS&P (an interstate motor carrier), and as a part-time driver/helper by a moving and storage company (an interstate motor carrier). The busdriver had not worked at any of his three jobs for the 3 days preceding his first trip to Cheyenne on the evening of July 16. At the time of the accident, the busdriver had been on duty about 19 hours since his last 8 or more consecutive hours off duty, and had worked during this time for both DCS&P and the moving and storage company. He obtained a maximum of about 3 1/2 hours sleep during the 27 hours 35 minutes before the accident. The last entry in the busdriver's daily logbook was on July 9, 1984. DCS&P did not ask the driver for a statement of hours of service or for his daily log before he started the accident trip, as required by Federal regulations for part-time drivers who work for another motor carrier.

1/ Highway Accident Report--"Fatigue-Related Commercial Vehicle Accidents: Cheyenne, Wyoming, July 18, 1984, and Junction City, Arkansas, October 19, 1984" (NTSB/HAR-85/04).

Full-time drivers for DCS&P are required to prepare and submit a driver log of duty hours in compliance with the Federal Motor Carrier Safety Regulations (FMCSR) each day, whether they drive or not. Dispatchers working the 11 p.m. to 7 a.m. shift use a log check-off sheet and furnish the Lead Transportation Supervisor once each week with a list of all missing logs for full-time drivers. When a log is missing, the driver is given a letter telling him that he will be removed from service if the logs are not brought up to date. After 13 days, the driver is removed from service until all logs more than 13 days old are turned in to DCS&P.

The Lead Transportation Supervisor for DCS&P reported that it was company policy to obtain driver daily logs in lieu of a signed statement from intermittent drivers showing on-duty time during the preceding 7 days. He said that all dispatchers should know that these logs are required to be obtained and that DCS&P depended upon the part-time drivers to turn in their logs. No records were maintained to indicate when a part-time driver log was due. If it was known that a part-time driver log was due, no action would be taken to remove the driver from service until 13 days after the date of the overdue log.

The Transportation Supervisor/Dispatcher who contacted the accident busdriver concerning the runs to be driven the evenings of July 16 and 17, 1984, reported that she was not aware of the requirement that information on prior hours of service must be obtained from part-time drivers, and that she had been given no procedures to follow to obtain this information. She stated also that if she had known about the busdriver's part-time job at the moving and storage company, she would not have given the busdriver the dispatch on the evening of July 17, 1984.

Effective January 1, 1983, the FMCSR were amended to allow commercial drivers 13 days to turn in their driver daily logs or duty status records rather than daily. The Vice President of Safety and Security for Trailways Lines, Inc. (Trailways), the parent company of DCS&P, reported that when the rule was amended, he distributed the new rule with a cover memorandum which stated that Trailways and its affiliates would not change the driver daily log procedures and that logs still would be turned in daily. He also reported that DCS&P decided, apparently without consulting Trailways, to implement a change in procedure which permitted the 13-day period before logs had to be turned in. He stated that he did not implement the new 13-day log turn-in rule because it "conceivably in my view lessened our ability to supervise and control" the drivers, and "in fact, my judgment was that I may lose something safety-wise."

After the accident, Trailways and all its affiliates instituted procedures requiring part-time drivers to furnish the employing bus company annually a list of their other employers and the hours worked with each employer. This information is to be made available to dispatchers at each dispatch point. Dispatchers now are required to obtain from a part-time driver a statement of on-duty time during the preceding 7 days prior to each time the part-time driver is dispatched.

About 7:30 a.m. on October 19, 1984, a tractor-flatbed semitrailer, operated by Brown Transit, Inc., (Brown) and traveling about 50 to 55 mph, struck the rear of a stopped schoolbus on southbound State Route 167 near Junction City, Arkansas. The 1977 schoolbus, operated by the Junction City, Arkansas, School District with its 33 occupants, was pushed about 220 feet south of the point of impact where both vehicles came to rest. The pavement of the straight, two-lane highway was dry, the weather was clear, and the

sight distance to the rear of the schoolbus was at least 1,000 feet. One bus passenger was injured seriously. The truckdriver, the busdriver, and 25 bus passengers had minor injuries. Six bus passengers were not injured. 2/

The truckdriver had 4 years' experience as a truckdriver, had worked full-time for Brown for about 5 months, and stated that he did not have any part-time jobs. During the 3 weeks preceding the accident, the truckdriver had 4 days off duty-- October 7, and October 11 through 13. The truckdriver stated that on the day before the accident he left Kansas City, Missouri, about 3:30 p.m. in a Brown truck to make a delivery at Conway, Arkansas. He arrived in Conway about midnight. He telephoned the Brown dispatcher before he arrived in Conway to advise him that he was about to make the delivery in Conway. The dispatcher asked the truckdriver if he would take a loaded trailer from Conway to Lafayette, Louisiana, and advised the truckdriver that the load did not have to be delivered until sometime on October 19, 1984. The truckdriver accepted the dispatch. When he arrived in Conway, he dropped his trailer, fueled his truck, made a pretrip inspection, and left for Lafayette with the new load at about 1 a.m. The last entry found in the truckdriver's daily log was made on the day before the accident. Brown did not ask, nor was it required to ask, the full-time truckdriver for a statement of hours of service or a daily log before he started on the accident trip.

Brown is a general commodities interstate motor carrier which operates within a 500-mile radius of Little Rock, Arkansas. The company has 32 full-time drivers, 2 dispatchers, 37 tractors, and 89 trailers (25 of which are leased). The dispatchers monitor driver progress by talking to each driver twice daily. The company vice president reported that drivers "are required to drive the legal hours," that "they have to turn in a legal log," and that "each log is checked." If Federal rule violations are discovered, the terminal manager counsels the driver. The company owner stated that the company has "not had too much trouble" with improper entries and that its drivers "don't have to run illegal."

On October 29, 1984, the Office of Motor Carrier Safety (OMCS) of Region 6 of the Federal Highway Administration conducted a safety compliance survey of Brown. The OMCS noted at least 80 violations of the FMCSR and rated the company unacceptable for violations to FMCSR Part 395 "Hours of Service of Drivers." The OMCS charged the company later with 30 counts of "Requiring or permitting drivers to make false entries upon a record of duty status" and recommended that the company establish a program to eliminate driver log violations.

Section 395.2 of the FMCSR defines "on duty" time as all time from the time a driver begins to work or is in readiness to perform work until the time he is released from work and from all responsibility for performing work in the capacity of, or in the employ or service of, a common, contract, or private motor carrier. "On duty" time does not include the time a driver works for another business employer who is not a motor carrier.

Section 395.3 of the FMCSR, with some exemptions, prohibits interstate commercial drivers from driving more than 10 hours since their last 8 or more consecutive hours off duty, driving after having been on duty more than 15 hours since their last 8 or more consecutive hours off duty, and remaining on duty more than 60 hours in any period of 7 consecutive days.

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2/ Ibid.

Drivers are required to record and report their hours of service either on the 24-hour driver daily log form, on a multiday log sheet showing the driver's activities for a period of up to eight consecutive 24-hour periods, or on a 24-hour time grid incorporated into any other document used by the employing motor carrier which contains certain specified items of information. Drivers operating within a 100 air-mile radius of the normal work reporting location are exempted from the duty status record preparation if certain other requirements are met. Employing motor carriers must retain required driver hours of service records for 6 months.

Section 395.8(i) of the FMCSR, as amended effective January 1, 1983, states that, "The driver shall submit or forward by mail the original driver's record of duty status to the regular employing motor carrier within 13 days following the completion of the form." Before this change in the rule, a driver was required to deliver the original log sheet to the motor carrier immediately upon completion of the last log, or to mail the record to the carrier if the driver was not going to be at a carrier facility for more than 5 days after the last log sheet was completed.

Although the preamble to the rule in the Federal Register does not discuss how the 13-day period was selected, Bureau of Motor Carrier Safety (BMCS) officials advised the Safety Board that because the maximum of 8 days permitted on any multiday log sheet, added to the 5-day mailing time specified in the rule before it was amended, totaled 13 days; therefore, the period of 13 days was selected to be the maximum time to be allowed by the revised rule for the submission of the duty status record. The revised rule does not differentiate between the single-day log sheet, the multiday log sheet, or the time grid incorporated into another document. A driver may therefore retain custody of a single-day log sheet for up to 13 days after the time it is required to be completed.

As part of the Cheyenne investigation, BMCS officials stated to Safety Board investigators that, from an enforcement viewpoint, there was no need for logs to be submitted each day, that the BMCS believed enforcement of the hours of service rules would not be hampered by the rule changes, and that motor carriers could impose more stringent requirements for forwarding logs or duty status records if they desired.

Although the rule change that became effective on January 1, 1983, permits a driver to retain custody of the duty status record for 13 days, the logbook rule which has been in effect since the logbook requirements were established in 1938 still requires that the duty status record be kept current to the time shown for the last change of duty status.

Part 395.8(j)(2) of the FMCSR requires that:

Motor carriers, when using a driver for the first time or intermittently, shall obtain from the driver a signed statement giving the total time on duty during the immediately preceding 7 days and the time at which the driver was last relieved from duty prior to beginning work for the motor carriers.

This rule requires that a motor carrier using a driver who also is employed by other motor carrier(s) obtain a record showing all of that driver's "on-duty" time which provides information the motor carrier needs to determine if further use of the driver will result in a violation of the FMCSR limiting a driver's hours of service. Its effectiveness depends upon the motor carrier requiring the statement before the driver is dispatched and the driver giving an accurate account of his activities. A BMCS interpretation of this

rule published in the Federal Register on November 23, 1977, stated that a driver's log or record of duty status for the previous 7 days is an acceptable substitute for the signed statement specified by the regulation.

During the 27 1/2 hours before the Cheyenne accident, the busdriver had worked for the bus company and for the moving and storage company and had slept for not more than about 3 1/2 hours. The truckdriver in the Junction City accident had been on duty for about 16 hours since his last 8 or more consecutive hours off duty and had been driving his truck 13 of those 16 hours with two 1-hour rest periods. He probably was awake at least another hour preparing for and traveling to work before he went on duty. The facts of these accidents indicate, and the Safety Board concludes, that the truckdrivers were inattentive and were suffering from lack of sleep and from acute fatigue at the time of the accidents.

Sleep loss and acute fatigue had suppressed the vigilance of the drivers in these accidents to a virtually ineffective level. In the few minutes preceding each collision, they apparently still were capable of performing the minimal tracking tasks required to keep their vehicles on the road and in the proper lane. The truckdriver in the Junction City accident apparently was visually sensing his environment without being able to perceive a threat before the collision. The busdriver in the Cheyenne accident probably was asleep when he collided with the rear of the truck.

Driver inattention and fatigue have been identified as recurring factors in several commercial vehicle accidents investigated by the Safety Board and have resulted in numerous injuries and fatalities. In an accident investigated by the Safety Board in Livingston, Texas, on November 30, 1983, six persons were killed and six persons were injured when an intercity bus struck the rear of a tractor-semitrailer. <sup>3/</sup> As a result of the Livingston accident, the Safety Board issued Safety Recommendation H-84-60 to the BMCS on August 8, 1984:

Determine practical methods and means to prevent or minimize dozing at the wheel by drivers of carriers in interstate commerce, and advise the Safety Board of its findings.

In its September 25, 1984, response to this recommendation, the BMCS agreed to undertake a research study on the problem of driver fatigue. To date, the BMCS has not done so. The Safety Board believes that the BMCS is not placing enough emphasis on methods to prevent potentially catastrophic accidents involving fatigued drivers of commercial vehicles engaged in interstate commerce and reiterates Safety Recommendation H-84-60 to the BMCS.

The "on duty" time defined in Section 395.2 of the FMCSR and recorded on the driver daily log does not include the time a commercial driver is employed on a job other than with another motor carrier, i.e., the part-time busdriver in the Cheyenne accident was not required to record the time he spent on his full-time job as a firefighter, but he was required to record the 8 hours he worked for the moving and storage company (a motor carrier) 8 hours before the accident. The Safety Board believes that the definition of "on duty" time in Part 395.2 of the FMCSR should be revised to include all time worked by a commercial vehicle driver for all other full-time and part-time employers.

<sup>3/</sup> Highway Accident Report--"Trailways Lines, Inc., Bus/E.A. Holder, Inc., Truck, Rear End Collision and Bus Run-Off-Bridge, U.S. Route 59, near Livingston, Texas, November 30, 1983" (NTSB/HAR-84/04).

Between 1938 and 1977, drivers engaged in interstate commerce were required to record and report their hours of service on a driver daily log. Drivers were required either to turn in their log for the previous 24 hours when they reported for duty at the carrier's facility the next day, or to mail it to the employing motor carrier immediately after the 24-hour period was completed if they were not to return to the employer's facility within the time required for a normal mail delivery.

In rule changes between 1977 and January 1, 1983, the BMCS extended the time period in which a driver must forward a daily log or duty status record to the employing motor carrier from "each day" to a maximum of 13 days, regardless of the type of log or duty status record being used by the driver or employing motor carrier. The Safety Board does not concur in the belief expressed by BMCS officials in the Cheyenne accident investigation that the 13-day retention rule will not adversely affect enforcement activities. A BMCS investigation of a driver's activities may in fact be hindered because the existence of such a rule may prevent the BMCS from obtaining a driver's duty status record from a motor carrier until the driver turns it in 13 days after an incident occurs. Since a driver can retain custody of the duty status record, the record can be changed to conceal a driver's true activities performed within a given period of time from both the motor carrier and BMCS investigators. Drivers are free to "backtrack" and spread out the amount of work performed over a longer period of time, to insert fictional rest breaks when in fact they were not taken, and in general to have a greater amount of time to "doctor" their duty status records to conceal violations.

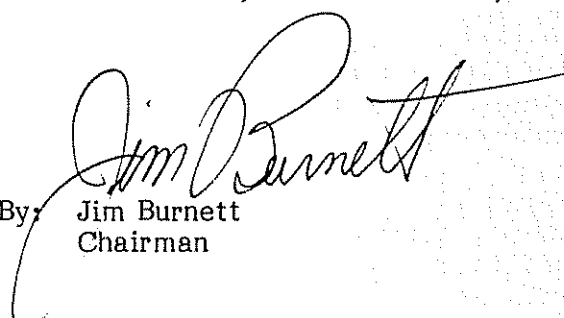
The Safety Board concludes that the rule which permits a driver to retain custody of the duty status record for up to 13 days after it is prepared not only does not reduce any paperwork burden, but rather it has weakened the capability of the BMCS to promptly investigate and detect hours of service violations. This rule should be amended to require drivers to immediately forward their duty status records to the employing motor carrier upon completion of the record.

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

Revise Section 395.8(i) of Title 49, Code of Federal Regulations, to require that drivers forward each duty status record to the employing motor carrier immediately upon completion. (Class II, Priority Action) (H-85-20)

Revise Section 395.2 of Title 49, Code of Federal Regulations, to add all time worked by a commercial vehicle driver for all full-time and part-time employers to the definition of "on-duty" time. (Class II, Priority Action) (H-85-21)

BURNETT, Chairman, GOLDMAN, Vice Chairman, and BURSLEY, Member, concurred in these recommendations.

By:   
Jim Burnett  
Chairman