AI-4 H-323

## NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

ISSUED:

MAY 25 1982

SAFETY RECOMMENDATION(S)

H-82-13

## Forwarded to:

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Honorable George D. Busbee Governor of Georgia Atlanta, Georgia 30334

Honorable David C. Treen Governor of Louisiana Baton Rouge, Louisiana 70801

Honorable William F. Winter Governor of Mississippi Jackson, Mississippi 39201 Honorable Frank White Governor of Arkansas Little Rock, Arkansas 72201

Honorable Richard W. Riley Governor of South Carolina Columbia, South Carolina 29201

Honorable D. Robert Graham Governor of Florida Tallahasse, Florida 32301

Honorable William P. Clements, Jr. Governor of Texas Austin, Texas 78701

About 2:40 p.m., c.d.t., on October 12, 1981, a truck tractor-pole semitrailer, laden with sixteen 75- to 80-foot pine logs was southbound on U.S. Route 45, about 1 mile south of Waynesboro, Mississippi. A schoolbus occupied by the driver and 49 students was also southbound following behind the truck. As the truck approached Industrial Park Road, it moved into a right turn lane, decelerated, and initiated a 125° right turn. The overlength logs swung leftward across the southbound through-traffic lane and into the path of the overtaking schoolbus. The schoolbus struck the swinging logs, traveled forward to the right, struck the extreme front end of an eastbound automobile, which was stopped on Industrial Park Road at the intersection, and then struck and overrode a utility pole in the southwest quadrant of the intersection. Three bus passengers were killed, and 18 bus passengers and the driver were injured. 1/

Traffic counts taken in 1980 show an average daily traffic (ADT) of 5,680 vehicles for the area of the highway south of Waynesboro and north of the Industrial Park Road intersection, and an ADT of 5,110 vehicles south of the intersection. No counts of vehicles turning at the intersection have been made but observations made by the Mississippi State Highway Department indicate there are a large number of vehicles, particularly southbound vehicles, turning during peak traffic hours (6:30 a.m. to 8:30 a.m., and 4:00 p.m. to 6:00 p.m.). The traffic counts do not distinguish the numbers of automobiles and trucks.

<sup>1/</sup> For more detailed information, read Highway Accident Report—"Herman Duvall Tractor-Pole Semitrailer/S. L. & B Academy, Inc., Schoolbus Collision, U.S. Route 45, near Waynesboro, Mississippi, October 12, 1981" (NTSB-HAR-82-2).

One official at the sawmill estimated that about 125 trucks per working day enter the sawmill from the U.S. 45 - Industrial Park Road intersection.

During the investigation, Safety Board investigators observed traffic flow through the intersection. Most of the loaded logging trucks approached the intersection from the north and turned right onto Industrial Park Road. In each turn, the logs with extensive rear overhang protruded upon the U.S. 45 southbound travel lane. When there was other traffic close behind them, the logging truckdrivers sometimes stopped and allowed that traffic to clear before initiating the right turn. Drivers of vehicles following the logging trucks would observe the trucks approaching the turn, slow down, stay behind until the trucks were into the turn and the logs had cleared, and then accelerate through the intersection. On several occasions, both the truckdrivers and drivers of following vehicles stopped at the same time, causing momentary confusion, but no near accidents or significant traffic obstructions were observed.

The Pine Belt is a geographical area defined by the covering of yellow (southern) pine trees. It is described as a belt-like area which is about 150 miles wide (north to south) and extends from Texas eastward into Georgia and South Carolina. Waynesboro, Mississippi, is within this area. Because of its availability and characteristics, yellow pine is extensively used in building, particularly in residential construction. The logging industry is extensive throughout the Pine Belt area. There are two sawmills located on Industrial Park Road, both 0.65 mile west of U.S. 45. These sawmills are the destination for most of the logging truck traffic in the Waynesboro area.

Section 63-5-19, of the Mississippi Code of 1972, effective July 1, 1980, limits the maximum length of vehicles to 55 feet. However, Section 63-5-21 specifically excepts trucks hauling forest products from length (including rear overhang) restrictions. Daytime flagging of loads is required. The logging truck with its 12-inch square red flag was in compliance with State laws.

The Safety Board attempted to determine the hazards to highway traffic created by trucks hauling logs with extensive rear overhang on a local, Statewide, and regional basis. To accomplish this, accident records were requested from the City of Waynesboro and Wayne County. In addition, inquiries were made of the States of Texas, Arkansas, Louisiana, Mississippi, Alabama, Georgia, Florida, and South Carolina requesting information which would help define exposure data and the representation of such trucks in each State's accident statistics.

The Waynesboro Police Department furnished information which showed that between November 3, 1978, and November 12, 1981, there had been 15 accidents involving logging trucks within the city limits. No information was furnished which would indicate the percentage of such accidents to the total accidents occurring in that city. Three (20 percent) of the logging truck accidents involved swinging logs in a turning maneuver configuration similar to this accident. Two of the three accidents involved property damage only and the third resulted in hospital treated injuries.

Information furnished by the Wayne County Sheriff's Department showed 12 accidents involving trucks with tree-length logs between March 9, 1979, and August 14, 1981. No information was available on the percentage of all accidents investigated by the Sheriff's Department. All 12 accidents occurred on county roads outside of Waynesboro.

The 27 accidents investigated by the Police Department and the Sheriff's Department do not represent all of the logging truck accidents which have occurred

within Wayne County during the specified time periods. Other accidents have occurred on State or Federal designated highways within Wayne County and were investigated by the Mississippi Highway Patrol. Because the State of Mississippi does not "...capture the type of tractor-trailer rigs on accident reports," the highway patrol could not furnish the requested accident statistics.

The survey of the eight Pine Belt States, Texas, Arkansas, Louisiana, Mississippi, Alabama, Georgia, Florida, and South Carolina, revealed that only half of those States had any restrictions with respect to rear overhang in hauling forest products. Only one of the eight States, Arkansas, was able to provide any accident statistics, vehicle population, or exposure data regarding trucks used in transporting forest products. State law enforcement officials in each of the eight States were asked to comment as to whether or not there existed any indications that these trucks caused a particular problem in highway traffic safety in their respective States. Officials from the State of Georgia did not comment. Officials from the States of Alabama, Florida, and Texas believed that a problem existed, at least to some extent, while officials of the States of Louisiana, Arkansas and South Carolina saw no particular indication of special problems.

During the investigation, several law enforcement officers and officials at different levels of government expressed concern about the hazards to highway safety presented by logging trucks, especially those with extensive rear overhang. During a 3-year period, 27 logging truck accidents were investigated by either the Waynesboro Police Department or the Wayne County Sheriff's Department. This number does not include accidents investigated by Mississippi Highway Patrol officers which occurred in Wayne County during the same 3-month period. There was no response from the local Highway Patrol Office to Safety Board requests for those statistics. Analysis of the accident reports obtained revealed that 20 percent of the accidents involved turn maneuvers by the trucks with a resultant swing of rear overhang logs. The data are not sufficiently extensive to be statistically reliable, but there is an indication that a problem could exist which should be studied by the Pine Belt States. The Safety Board notes that those States which restrict rear overhang on logging trucks also appear to be experiencing the least problems from those type vehicles; this may well be attributable to the effectiveness of those restrictions. The Safety Board believes that sufficient justification exists to warrant a study by each of the Pine Belt States to determine the extent to which trucks hauling forest products with extensive rear overhang contribute to that State's highway safety problems and to take appropriate remedial action.

Therefore, as a result of its investigation of this accident, the National Transportation Safety Board recommends that the Governors of the States of Florida, Georgia, South Carolina, Alabama, Mississippi, Louisiana, Arkansas, and Texas:

Conduct a study within each State to determine whether trucks hauling logs or other objects with extensive rear overhang represent a significant safety hazard to the motoring public. If the study determines that extensive rear overhang on trucks hauling logs or other objects with extensive rear overhang is a significant safety hazard, take appropriate remedial action. (Class II, Priority Action) (H-82-13)

BURNETT, Chairman, GOLDMAN, Vice Chairman, and McADAMS and BURSLEY, Members, concurred in this recommendation.

By: Jim Burnett

