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SP-20

NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

ISSUED: June 4, 1985

Forwarded to:

Governors of Alabama, Alaska, Colorado, Georgia, Tennessee, and West Virginia

SAFETY RECOMMENDATION(S)

H-85-8

About 1:55 p.m., on September 28, 1983, a privately-owned 1971 schoolbus, being operated for profit and carrying 37 elementary school children, was traveling in the left westbound lane of U.S. Route 41 in Miami, Florida. The bus began to weave within the travel lanes, veered left onto the adjacent grass median of the dry, four-lane, divided roadway, swerved back into the travel lanes, overturned on its left side, and came to rest facing east. The busdriver and 30 students received minor to moderate injuries; 7 students were not injured. 1/

A postaccident inspection revealed several preexisting vehicle discrepancies. The left front shock was separated completely from its front axle attachment, the right outside dual tire on the rear axle was flat, and three of the six tires were worn smooth. The inflation pressures were 36 and 56 psi for the two front tires and 28 to 43 psi for the three inflated rear tires. The manufacturer's recommended maximum inflation pressure is 85 psi for a single tire wheel and 75 psi for a dual tire wheel. A sharp piece of metallic spring wire, which had penetrated the tread and ruptured the inner tube before the accident, was found in the flat tire.

The busdriver purchased the used bus in January 1983. Although privately-owned schoolbuses in Florida are required to be inspected annually, the bus did not have a current State inspection sticker. The owner performed vehicle maintenance at her discretion. She did not keep, nor was she required to keep, any maintenance records.

About 8:05 a.m., on April 12, 1984, a privately-owned 1965 schoolbus, being operated under contract and carrying an adult aide and 25 mentally retarded and physically handicapped students, accelerated out of control while descending a steep, one-block-long grade in Birmir.gham, Alabama. The bus failed to stop at the intersection at

^{1/} For more detailed information, read Highway Accident Report--"Schoolbus Loss of Control Accidents in Miami, Florida, September 28, 1983, and Birmingham, Alabama, April 12, 1984" (NTSB/HAR-85/03).

the bottom of the downgrade and struck a large tree head-on. The busdriver and 7 students sustained moderate injuries, the adult aide and 8 students were treated for minor injuries, and 10 students escaped injury. 2/

A postaccident inspection revealed several preexisting vehicle discrepancies. The brake master cylinder reservoir was empty (without brake fluid). The lower brake wheel cylinder in the left rear wheel assembly was leaking brake fluid, and the brake linings and drum were contaminated with a mixture of brake fluid and other debris from the wheel. The brake lining on the forward shoe of the right rear wheel was worn to the rivets, and the inside diameter of the brake drum was more than 0.120 inch over its original diameter of 15 inches. The inside dual inner tire on the rear axle was worn smooth (no measurable tread depth). The tread depth on the remaining five tires ranged from 3/32 to 12/32 inch, and the inflation pressures ranged from 40 to 82 psi. The manufacturer's recommended maximum inflation pressure is 85 psi for a single tire wheel and 75 psi for a dual tire wheel. The busdriver advised a Safety Board investigator that the turn signals, four-way flasher, taillights, and stoplights were inoperative at the time of the accident.

The State of Alabama requires annual and monthly inspections and vehicle maintenance for all schoolbuses under contract to public school districts. The schoolbus owner stated that he was not aware of these requirements and performed vehicle maintenance at his discretion. He had inspected the accident bus visually about five times since he purchased it in October 1983 and had made some repairs to the vehicle brakes. He said that he had replaced the brake linings and had installed a used brake drum on the left rear wheel. He kept no maintenance records regarding the accident bus. The busdriver did not inspect the schoolbus regularly and only noted mechanical problems when they became evident. He said that he advised the schoolbus owner of the brake problem 3 weeks before the accident and that the owner told him that he would repair the bus when he got the money to do so. Consequently, the busdriver added brake fluid daily to the master cylinder to continue operating the vehicle.

State and local school officials had little program supervision over the schoolbuses involved in the accidents and had left the responsibility for vehicle maintenance to the discretion of the vehicle owners. Both buses were at least 12 years old and had several mechanical discrepancies which existed before the accidents. Neither bus had received the annual vehicle inspection required by the States they operated within. The bus owners either were unaware of the State inspection requirements or chose to ignore them. The Safety Board believes that State schoolbus inspections should be enforced and that any schoolbus—public or private—used to transport students should be subject to the same level of vehicle inspection and periodic maintenance to ensure that it is in safe operating condition.

In 1984, the National School Transportation Association surveyed State directors of pupil transportation and 22 State contractor associations in the 50 States and the District of Columbia to gather information on State laws and other policies applicable to pupil transportation safety. All of the States except Hawaii responded to the survey. Forty-three States, including Florida, and the District of Columbia currently require both public schoolbuses and privately-owned schoolbuses to be inspected annually. Six States (Alabama, Alaska, Colorado, Georgia, Tennessee, and West Virginia) require only public

schoolbuses and privately-owned schoolbuses under contract to a public school system to be inspected annually. The Safety Board believes that these States should revise their motor vehicle inspection procedures to require all privately-owned schoolbuses to be inspected annually.

Therefore, the National Transportation Safety Board recommends that the States of Alabama, Alaska, Colorado, Georgia, Tennessee, and West Virginia:

Amend State motor vehicle inspection laws to require that all privately-owned pupil transportation vehicles be inspected annually. (Class II, Priority Action) (H-85-8)

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 actions taken as a result of its safety recommendations and would appreciate a response from you regarding action taken or contemplated with respect to the recommendation in this letter.

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

By: Jim Burnett Chairman

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