

## National Transportation Safety Board

Washington, D.C. 20594 Safety Recommendation

09.H-531B Date: June 5, 1989

In reply refer to: H-89-17

Honorable Diane Steed Administrator National Highway Traffic Safety Administration Washington, D.C. 20590

About 11:25 a.m. eastern standard time on November 29, 1988, a chartered intercity bus carrying a driver and 49 passengers en route to Atlantic City, New Jersey, from New York City, New York, was traveling southbound in the right "express" lane of the New Jersey Garden State Parkway, near Tinton Falls, New Jersey. The bus, without signaling, gradually veered rightward off the travel lane, sideswiped a guardrail, skidded back onto the highway, overturned onto its right side, and slid about 220 feet diagonally across the two express lanes before coming to rest facing east with the rear of the bus across half of the left travel lane. There was no intrusion into the occupant compartment, no other vehicles were involved in the accident, and there was no fire. Forty-nine passengers (ages 60 to 85 years) and the 39year-old busdriver sustained minor to severe injuries such as fractured ribs, lacerations, abrasions, and contusions.<sup>1</sup>

Twenty-seven passengers seated in the left side of the bus were thrown from their seats and fell on top of the 22 passengers seated on the right side of the bus during the overturn sequence. These 49 passengers became entangled on the right side of the bus while it slid diagonally across the highway before coming to a rest.

During the overturn sequence, six aisle side seat armrests on the left side were broken off and two were bent into the aisle as a result of passengers being thrown laterally from their seats to the right side of the bus. Although the Safety Board could not attribute any passenger injuries to the broken armrests, the detached armrests were potentially dangerous free-flying objects; the attached broken parts had sharp, jagged edges, which could have inflicted injuries on the passengers. The passengers believe they were protected by their winter clothing.

<sup>&</sup>lt;sup>1</sup>For more detailed information, read Highway Accident/Incident Reports--"Intercity-Type Buses Chartered for Service to Atlantic City, New Jersey" (NTSB/HAR-89/01/SUM).

The type of seats installed in the accident bus have been manufactured by Wakefield International Seating, Inc., since 1985. The seat manufacturer estimates that currently in the United States, approximately 13,126 seat units are now in service in various buses including Motor Coach Industries, Transportation Manufacturing Corporation (TMC), and Neoplan. Worldwide, approximately 215,000 units are in service. In 1988, approximately 5,800 seat units were installed in buses sold in the United States.

The Safety Board is concerned that there may be a safety defect with the Wakefield seat armrests which could be injury-producing and believes that the National Highway Traffic Safety Administration should evaluate this matter further to determine if a defect investigation is warranted. Meanwhile, the Board will continue to monitor the performance of similar armrests in other accidents involving intercity buses.

Therefore, the National Transportation Safety Board recommends that the National Highway Traffic Safety Administration:

Evaluate the armrest separation problem on seats manufactured by Wakefield International Seating, Inc., to determine if a defect investigation is warranted. (Class II, Priority Action) (H-89-17)

Also, as a result of its investigation, the Safety Board issued Safety Recommendation H-89-15 to Leisure Time, Inc.; H-89-16 to the United Bus Owners of America and the American Bus Association; H-89-18 to the New Jersey Department of Transportation; and H-89-19 to the Federal Highway Administration.

KOLSTAD, Acting Chairman, and BURNETT, LAUBER, NALL, and DICKINSON, Members, concurred in this recommendation.

James L. Kolstad

By: James L. Kolstad Acting Chairman