

H-268A

NATIONAL TRANSPORTATION SAFETY BOARD  
WASHINGTON, D.C.

ISSUED: March 24, 1981

Forwarded to:

Mr. Henry C. Gray  
Director of Highways and Transportation  
State of Arkansas  
P.O. Box 2261  
Little Rock, Arkansas 72203

SAFETY RECOMMENDATION(S)

H-81-10

On June 5, 1980, about 12:47 a.m., a northbound Central Texas Bus Lines, Inc., charter bus, occupied by the driver and 32 passengers, accelerated out of control while descending a long, curved, steep grade on State Route 7 about 1 mile south of Jasper, Arkansas. The bus failed to negotiate a left curve and ran off the right pavement edge into a drainage channel. The bus continued for 280 feet, impacted the berm at a concrete culvert, was redirected across the highway, and vaulted down a steep embankment. Twenty bus occupants, including the driver, were killed and 13 passengers were injured. 1/

The bus probably entered State Route 7 from Interstate 40 at Russellville, Arkansas, and traveled 63 miles north along State Route 7 to the accident site. Safety Board investigators determined that the many warning signs posted along State Route 7 between Russellville and Jasper may not have been as effective as intended, specifically signs with legends similar to "CROOKED AND STEEP NEXT 63 MILES, PASS WITH CARE," because they appeared with such monotonous regularity. Additional signs, such as "STEEP GRADE, TRUCKS 15 MPH" seemed not to be warranted in some places because of the highway geometry. Eighty percent of the northbound, off-the-road accidents between the hillcrest and Jasper in 1976, 1977, and 1978 involved nonresidents of the area, which suggested that unfamiliarity with the highway may have played a role in some accidents. The Safety Board concluded that when drivers who are unfamiliar with the roadway reached the hillcrest 2.2 miles south of the accident site, they may not have been adequately notified about the highway situation ahead. On July 28, 1980, the Safety Board recommended that the State of Arkansas resign State Route 7, and the State informed the Safety Board on September 2, 1980, that the resigning had been done.

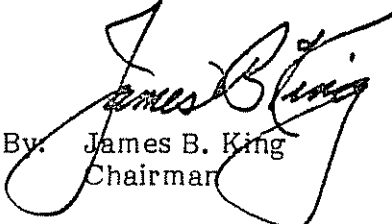
1/ For more detailed information read "Central Texas Bus Lines, Inc., Charter Bus, State Route 7, near Jasper, Arkansas, June 5, 1980" (NTSB-HAR-81-1).

When the bus ran off the road, its right wheels descended a slope into a drainage channel which paralleled the road and was located 19 feet right of the roadway centerline. The 2-foot-deep drainage channel on the cut slope side had a side slope ratio of 1:4 (horizontal to vertical) which far exceeded the slope ratio of 4:1 recommended by the American Association of State Highway and Transportation Officials (AASHTO). Also, the channel bottom width of 1 foot was less than the recommended bottom width of at least 4 feet. These characteristics, coupled with the narrow, 4-foot-wide shoulder, made this ditch a hazard because the cross section did not permit the busdriver to redirect the errant vehicle back onto the roadway. The channel would be less of a hazard if the side slopes were corrected to conform to AASHTO recommendations.

Therefore, the National Transportation Safety Board recommends that the State of Arkansas:

Correct the drainage channel hazard at the accident site and, whenever feasible, take action to ensure that all highway drainage channels conform to the recommendations of the American Association of State Highway and Transportation Officials. (Class II, Priority Action)  
(H-81-10)

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

  
By. James B. King  
Chairman