

H-290 AI-4

NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

ISSUED: October 29, 1981

Forwarded to:
Mr. Russell Dickerson
Director
National Park Service
Department of Interior
18th and C Street
Washington, D.C. 20240

SAFETY RECOMMENDATION(S)

H-81-82 through -87

About 8:00 p.m. A.s.t., on June 15, 1981, a 40-passenger tour bus, eastbound on Denali Park Road, Denali National Park, Alaska, ran off the right edge of the roadway at a very slow speed and rolled to its right down a hillside. Twenty-five of the thirty-two occupants were ejected as the bus rolled 2 1/4 times down the hillside. Twenty-six occupants were injured, five occupants received fatal injuries, and the bus sustained moderate damage. 1/

Crushing injuries indicated that the bus had rolled onto several of the occupants, and interior deformation of the bus indicated occupant contact with the top and sides as well. Had the occupants been secured in place by restraints, they would not have been ejected from the bus and interior contact would have been minimized.

A student driver operated the bus and an instructor driver assisted by conducting the narrative portion of the tour. On the return trip, the student driver, who was on his first trip with passengers, was still driving but also had the responsibility of conducting the narration as well.

Within 1 1/2 miles of the turnaround point, the student driver drove off the right side of the roadway. The driver stated he believed he was in the center of the road and could not explain why he left the roadway. The driver was scheduled for a 40-hour driver training course the week following the accident, but on the day of the accident, he had only received one training trip into the Park interior on a bus without passengers. The 40-hour training course contained a section of instruction that required the driver to identify when he was 2 inches, 6 inches, or 3 feet from the road edge by the use of vehicle reference points. If the driver had developed this capability, the accident may have been prevented.

The rear view mirrors on the bus did not permit the driver to view the roadway alongside the bus near the front wheels. However, additional convex mirrors, properly adjusted, could provide additional reference points also to assist the driver to position the bus on the roadway.

1/ For more detailed information read Highway Accident Report--"ARA Services, Inc., Tour Bus, Denali National Park and Preserve, (Mt. McKinley National Park) Alaska, June 15, 1981" (NTSB-HAR-81-7).

The division of attention required of the driver to observe interesting items outside the bus and then explain them to the passengers detracts from his primary function of safely traversing the roadway. An additional employee on the bus to conduct the narrative portion of the tour would permit the driver to exert his entire attention to the driving task.

The main traveled portion of the roadway was firm and in good repair but was only 14 feet 5 inches to 15 feet 10 inches wide and without shoulders at the point the bus left the road. A Road Inventory and Inspection Program conducted by the Federal Highway Administration (FHWA) between 1976 and 1978 rated the Denali Park Road at least 2 feet narrower than standard and stated the shoulders did not meet standards of other construction carried on outside the Park.

As a result of the investigation, the National Transportation Safety Board recommends that the National Park Service:

Clarify the National Park Road Standards to specify minimum as well as maximum widths of both roadway and shoulders. (Class II, Priority Action) (H-81-82)

Require the Denali Park concessionaire, who is responsible for the operation of the tour and shuttle bus services, to require that all its drivers successfully complete a busdrivers training program comparable to that now required of shuttle busdrivers and to qualify annually all drivers who transport passengers. (Class II, Priority Action) (H-81-83)

In addition to the flat outside rearview mirrors, require the Park concessionaire, who is responsible for the operation of the tour and shuttle bus services, to equip its buses with convex mirrors on both sides to permit drivers to view the roadway adjacent to the front and rear wheels. (Class II, Priority Action) (H-81-84)

Require the Denali Park concessionaire, who is responsible for the operation of the tour and shuttle bus services, to equip each seating position in each bus with an occupant restraint and to require passengers to wear the restraints. (Class II, Priority Action) (H-81-85)

Conduct detailed surveys of other national parks to determine whether they have road conditions and/or bus service problems similar to those uncovered with respect to Denali Park and take appropriate actions as necessary to correct deficiencies. (Class II, Priority Action) (H-81-86)

Establish both long- and short-term National Park Service roadway and bridge improvement programs to address the road and bridge deficiencies as recommended by the Federal Highway Administration in its April 1981 Executive Summary of the Road and Bridge Inventory and Inspection Program report. (Class II, Priority Action) (H-81-87)

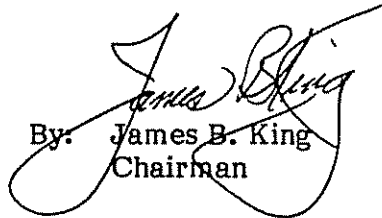
KING, Chairman, DRIVER, Vice Chairman, and BURSLEY, Member, concurred in these recommendations. McADAMS and GOLDMAN, Members, did not participate.

By: 
James B. King
Chairman

Therefore, the National Transportation Safety Board recommends that each State:

Review State laws and regulations regarding the transportation of bulk hazardous materials by trucks across crossings and modify them to conform with the Uniform Vehicle Code. (Class III, Longer-Term Action) (H-81-81)

KING, Chairman, and GOLDMAN and BURSLEY, Members, concurred in this recommendation. DRIVER, Vice Chairman, and McADAMS, Member, did not participate.


By: James B. King
Chairman

