

National Transportation Safety Board Washington, DC 20594

Highway Accident Brief

Accident No.: HWY-00-F-H028 Accident Type: Single vehicle rollover

Location: Texas State Highway 43, 1.5 miles north of Karnack, Texas

Date and Time: February 10, 2000, about 6:50 p.m.

Vehicle Involved: 1999 Ford E-350 XLT 15-passenger bus (van)

Owner: Enterprise Rent-A-Car Company

Operator: Prairie View A&M University student athlete

Operation: Athletic field trip

Vehicle Damage: Roof structure displaced about 19 inches to left and moderately

compressed downward at left front

People on Board: Ten—track coach, athletic trainer, and eight student track athletes

Injuries: Four fatal and six serious

Accident Description

About 2:30 p.m. on February 10, 2000, a 1999 Ford E-350 XLT 15-passenger bus¹ (van), rented from Enterprise Rent-A-Car Company (Enterprise), departed Prairie View A&M University (Prairie View) near Hempstead, Texas. The van was carrying a track coach, an athletic trainer, and eight student athletes, en route to a men's indoor track meet at Arkansas State University in Pine Bluff, Arkansas, a distance of approximately 480 miles. Estimated arrival time was midnight.

A 21-year-old student athlete, said to be familiar with the route, was driving, and the van was traveling north on Texas State Highway 43, a two-lane highway near Karnack, Texas (approximately 270 miles from Hempstead). About 6:50 p.m., the van was traveling at a police-estimated speed of approximately 82 mph in a posted 65-mph zone (nighttime) as it approached a northbound Jeep Cherokee (Jeep) that was signaling to turn left near the first entrance to a convenience store parking lot. It was dark, the weather was clear, and the road was dry. The highway did not have a left turn lane, and the Jeep was in the northbound travel lane. A van occupant sitting in the first row on the right, who had a clear view of the road ahead, later stated to the Texas Highway Patrol that the Jeep slowed while signaling to turn left, did not complete its left turn into the first entrance, remained in the northbound lane, and continued northbound. When the van driver attempted to pass the Jeep on the left from the southbound lane, the Jeep began its left turn into the second entrance of the convenience store, 174 feet beyond the first

¹ The *Federal Motor Vehicle Safety Standards* (49 CFR 571.3) define *bus* as a motor vehicle designed to carry more than 10 persons.

entrance. The van driver tried to reverse the passing action by swerving the van sharply to the right, and the van went out of control.

The Jeep driver said that he had not seen the van approaching from behind. He later stated to the Texas Highway Patrol that as he turned into the second entrance of the parking lot, he heard a noise, looked to his left, and "caught a glimpse of a vehicle that passed behind my vehicle." He said that he saw the van "violently rolling" out of control. No contact between the van and the Jeep occurred.

A Texas Highway Patrol reconstruction team determined that the van yawed² right, then left, dropped off the northbound pavement edge, and began overturning (see figure 1). The van traveled approximately 490 feet from where it began its yaw to where it came to its final position and about 265 feet from where it hit the pavement edge to where it came to rest. Evidence on the roadway indicated that the van flipped three full turns before coming to rest inverted.

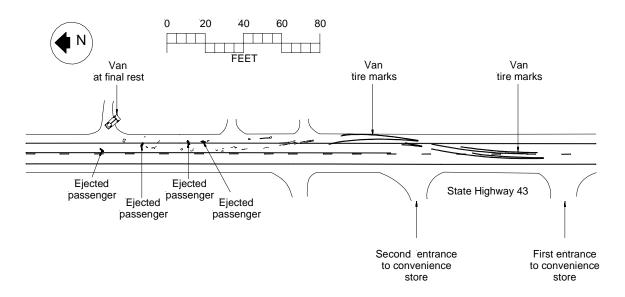


Figure 1. Accident diagram.

The accident resulted in fatal injuries to the van driver and three of the five ejected occupants. The remaining six passengers, including the two other ejected occupants. received serious injuries. Postcrash toxicological testing of the van driver's blood and urine specimens indicated no presence of alcohol or other drugs.

Highway patrol officers found that the driver's and the right front passenger's lap/shoulder belt latch plates showed loading marks, indicating that both front seat

To *yaw* is to turn by angular motion about the vertical axis.

At-rest position of fifth ejected passenger not documented.

Striations, caused by the seat belt material, left in the plastic of the belt lock.

occupants were restrained. The investigating patrol officers also stated that the deceased driver was lap/shoulder-belted. Evidence above the driver's door on the van indicated that the driver was partially ejected through the window. All of the rear seating positions were equipped with restraints: three-point lap/shoulder belts at the side positions and two-point lap belts at the middle positions. No evidence of seat belt use was found at any of the rear seating positions, indicating that all eight of the van's rear seat occupants were unrestrained. Texas statutes require that only adult occupants in the front seats be restrained.

Transportation Oversight

The Prairie View vice president of operations stated to National Transportation Safety Board investigators that the university athletic department is responsible for arranging team transportation to sporting events. The type of transportation requested by the participating coach varies, depending on the sport and size of the team traveling. Transportation by rental vehicles is one option. At the time of the accident, Texas had authorized the university to participate in a State contract agreement with Enterprise. A coach requesting an Enterprise vehicle completed a rental agreement form and notified Enterprise of the type of vehicle required. Enterprise delivered the vehicle to and retrieved it from the campus; the requesting coach was responsible for the vehicle while it was in the university's possession.

According to the Prairie View vice president of operations, the requesting coach or assistant coach usually drove the rental vehicles. The vice president added that student athletes have driven in the past, although it was not a customary practice. The student driver was selected to drive the accident van in lieu of the athletic trainer, whose operator's license had been suspended. The Texas State contract for rental vehicles required that drivers be at least 18 years old. The accident driver was 21 and held a Texas driver's license. Neither Texas nor any other State requires a special license to operate 15-passenger vans.

At the time of the accident, Prairie View did not have a written driving policy, except for a provision in its *Athletic Policies & Procedures* manual requiring that designated speed laws be obeyed when official vehicles were used for team functions. In June 2001, the Texas legislature passed a bill requiring that, by August 2002, all public institutions of higher education have a travel policy addressing fatigue, use of seatbelts, passenger capacity, and qualifications and training of drivers who operate a particular mode of transportation. After the accident, the university provided Safety Board investigators with a draft *Vehicle Safety Policy* that addressed general vehicle safety, defensive driving, how to back a vehicle, what to do in case of an accident, and railroad grade crossings; the policy did not cover driver qualifications, training, or seatbelt usage. Prairie View modified this draft and, in December 2001, adopted a *Vehicle Safety Policy* that conforms to the State requirements that take effect in August 2002.

Probable Cause

The National Transportation Safety Board determines that the probable cause of this accident was the excessive speed of the van, in combination with the operating maneuvers initiated by the van driver when he encountered the Jeep Cherokee; operating maneuvers by the Jeep Cherokee driver may also have been a factor. Contributing to the accident was the lack of oversight regarding the transportation of student athletes by the Prairie View A&M University. Contributing to the severity of the injuries were the failure of the State of Texas to require the use of restraints in all seating positions and the failure of the van passengers to use the available restraints.

Adopted May 9, 2002