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National Transportation Safety Board

Washington, D.C. 20594

Safety Recommendation

Log: H-628C

Date: AUG 4 2003

In reply refer to: H-03-19 and -20

Honorable Mark Warner
Governor
Commonwealth of Virginia
State Capitol
Richmond, Virginia 23219

The National Transportation Safety Board is an independent Federal agency charged by Congress with investigating transportation accidents, determining their probable cause, and making recommendations to prevent similar accidents from occurring. We are providing the following information to urge your State to take action on the safety recommendations in this letter. The Safety Board is vitally interested in these recommendations because they are designed to prevent accidents and save lives.

These recommendations address the need for 12- and 15-passenger van driver license endorsement and State vehicle safety inspections for tires. These recommendations are derived from the Safety Board's investigation of the May 8, 2001, rollover of a 1993 Dodge 15-passenger van on U.S. Route 82 near Henrietta, Texas, and the July 1, 2001, overturn of a 1989 Dodge Ram 15-passenger van on U.S. Route 220 near Randleman, North Carolina,[1] and are consistent with the evidence we found and the analysis we performed. As a result of this investigation, the Safety Board has issued 16 safety recommendations, 2 of which are addressed to the Commonwealth of Virginia. Information supporting the recommendation is discussed below. The Safety Board would appreciate a response from you within 90 days addressing the actions you have taken or intend to take to implement our recommendation.

On May 8, 2001, about 8:57 a.m., central daylight time, a 1993 Dodge 15-passenger van was eastbound on U.S. Route 82 near Henrietta, Texas, en route from Burkburnett, Texas, to an outlet mall in Gainesville, Texas. The driver and 11 passengers, all members of the First Assembly of God Church, occupied the van. As the vehicle approached milepost 538 in the left lane, at a calculated speed of 61 to 67 mph, the left rear tire experienced a tread separation and blowout; subsequently, the van departed the roadway and rolled over at least two times in the median, ejecting seven passengers before coming to final rest. The driver and three of the ejected passengers sustained fatal injuries, and eight passengers sustained serious injuries.

[1] For additional information, read National Transportation Safety Board, *Dodge 15-Passenger Van Rollover on U.S. Route 82 Near Henrietta, Texas, on May 8, 2001, and Dodge 15-Passenger Van Overturn on U.S. Route 220 Near Randleman, North Carolina, on July 1, 2001*, Highway Accident Report NTSB/HAR-03/03 (Washington, DC: NTSB, 2003).

On July 1, 2001, about 2:30 p.m., eastern daylight time, a 1989 Dodge Ram 15-passenger van was northbound in the left lane on U.S. Route 220, near Randleman, North Carolina, en route from Myrtle Beach, South Carolina, to Roanoke, Virginia. The van, owned by Virginia Heights Baptist Church of Roanoke, Virginia, was occupied by the driver and 13 passengers, ages 13 to 19. As the vehicle approached the Level Cross, North Carolina, exit, at a witness-estimated speed of 65 mph, the left rear tire experienced a tread separation and blowout; subsequently, the van moved from the left lane into the right lane, then back into the left lane, where it overturned and came to rest in the travel lanes. During the accident sequence, four passengers were ejected, one of whom was fatally injured and three of whom sustained serious injuries; the driver and the other nine passengers sustained injuries ranging from none to serious.

The National Transportation Safety Board determined that the probable cause of the accidents was tire failure, the drivers' response to that failure, and the drivers' inability to maintain control of their vans. Contributing to the accidents was the deteriorated condition of the tires, as a result of the churches' lack of tire maintenance, and the handling characteristics of the vans. Contributing to the severity of the injuries was the lack of appropriate *Federal Motor Vehicle Safety Standards* applicable to 15-passenger vans in the areas of restraints and occupant protection.

The National Highway Traffic Safety Administration's (NHTSA's) study on *The Rollover Propensity of Fifteen-Passenger Vans* demonstrated that 15-passenger vans are inherently unstable when loaded to the level for which they are designed—carrying more than 10 passengers. NHTSA therefore advises all van drivers to obtain specific training on the handling and operation of these vehicles. However, as investigators found during the Henrietta and Randleman accident investigations, the van owners were not aware of the information provided by NHTSA in its consumer advisory. The advisory has not reached all 15-passenger van operators, even those within the target group, such as churches, and the Henrietta and Randleman operators did not know that they should have specific training to operate the vans safely. Both accident drivers had experience operating 15-passenger vans, but no specialized training on the handling and driving characteristics of these vehicles; neither driver was able to control the van in an emergency.

As shown in the testing by Standards Testing Laboratories, Inc., and Safety Board staff, the van was controllable during an anticipated blowout, and the test driver thought that the effort required to control the vehicle was within the range of an unimpaired driver. The professional test driver also stated that the van was more difficult to control at higher speeds, particularly with lower tire inflation pressures, and that steering inputs were magnified after the blowout. The test driver had experience operating 15-passenger vans during a blowout, and he triggered the tire blowout himself, so the situation was not unexpected, as it was during the accidents.

While both accident drivers were familiar with their respective vans and had driven them previously, investigators did not find evidence that either driver had experienced an emergency situation, such as tire failure, while operating the van. Both drivers are likely to have overcorrected and braked following the blowout because they did not know how to respond appropriately to the vehicle dynamics that occurred after the blowout and did not understand the potential instability problems associated with 15-passenger vans. The drivers are likely to have reacted instinctively by attempting to correct the rotation of the van while braking to slow it. Had

the two drivers maintained their speed, not applied the brakes, and exerted more controlled steering, as the professional driver did during the tests, they may have been able to control their vans. Braking, the likely response on the part of both drivers, can lead to further vehicle instability during a tire failure, particularly in a fully loaded 15-passenger van with a high, rearward center of gravity. The drivers' lack of training on their vehicles' operating and handling characteristics, particularly in emergency situations, put them at a disadvantage in reacting to the blowout.

As the National Safety Council, the American Automobile Association, and most driver education programs recognize, acceleration is the appropriate response to a blowout, but that response is counterintuitive to the general public. Therefore, such groups emphasize that drivers need to refrain from braking and to decelerate slowly in the event of a tire blowout. This strategy requires that the driver provide steering input to counteract the lateral dragging force created by the blown tire. If a driver brakes, the lateral steering force experienced by the vehicle is greater and the driver must provide more steering input to maintain control of the vehicle. If the driver provides too much steering input, he or she will have to try to correct the direction of the vehicle and may oversteer. When the vehicle has a high, rearward center of gravity, as a loaded 15-passenger van does, the rapid changes in steering direction can lead to instability and rollover. A similar driver reaction to a blowout in a passenger car is unlikely to have such severe consequences because the passenger car's lower center of gravity makes it more forgiving of inappropriate driver inputs.

Impressing upon 15-passenger van drivers the inherent dangers of operating these vehicles, particularly when fully loaded, and educating them about proper handling and control, particularly during emergency situations, can reduce the risk of rollover. Such training can also help dispel the expectation that these vans operate like large passenger cars. While the accident drivers had experience operating the vans, they did not have experience with how the vehicles would respond in this type of emergency situation or other emergency situations or the consequences of their instinctive reactions to such situations. Educating drivers on how such vehicles respond to, and on the consequences of, different driver input could help operators approach 15-passenger van driving more cautiously.

In addition, training would provide a forum for educating drivers about the tire pressures and maintenance required for 15-passenger vans. The rear tires on a fully loaded van, for instance, must be inflated to 80 pounds per square inch (psi), which is much higher than the rear tire pressure for most passenger cars. Stressing the importance of proper tire inflation during training will help drivers avoid potential problems. Drivers should also be taught to check the tires and tire pressure before driving the vehicle. In both these accidents, the tires were in very poor condition, which should have been readily apparent to someone who knew to look for cracks and rotting rubber.

To ensure that drivers have the necessary skills to operate vehicles other than passenger vehicles, States have established classes of driver's licenses, for example, a commercial driver's license, a motorcycle license, or a chauffeur's endorsement, that require specialized training and testing. No such class of license exists for 15-passenger vans. Yet, as NHTSA has acknowledged, 15-passenger van operators need training in the handling of those vehicles, and testing has demonstrated that controlling 15-passenger vans in a blowout is possible for a trained

driver. The Safety Board concludes that safe operation of 15-passenger vans requires a knowledge and skill level different from and above that for passenger vehicles, particularly when the vans are fully loaded or drivers experience an emergency situation. The Safety Board has recommended that the American Driver and Traffic Safety Education Association, in cooperation with NHTSA, the National Safety Council, the American Automobile Association, Ford Motor Company, and General Motors Corporation, develop a training program for 12- and 15-passenger van drivers. The Safety Board believes that the States and the District of Columbia should establish a driver's license endorsement for 12- and 15-passenger vans that adopts the standards established by the American Driver and Traffic Safety Education Association; to obtain the endorsement, drivers should have to complete a training program on the operation of 12- and 15-passenger vans and pass a written and skills test.

Two of the Henrietta van's four tires, including the tire that suffered the tread/belt separation, were original tires (8 years old). Three of the four tires on the Randleman van were more than 8 years old. When not in use, both vans had been parked in the unprotected parking lots of their respective churches since purchase. The tires were subject to the ozone and ultraviolet light present outdoors, which can degrade the tire rubber, leading to dry rot and weather checking. These phenomena are typical of a sedentary vehicle; during normal use, anti-degradants introduced during the tire manufacturing process are released and brought to the surface of the tire. When a vehicle is not driven extensively (the Henrietta van averaged 5,500 miles per year and the Randleman van averaged about 7,000 miles per year), this release does not occur. Visual inspection of the two original tires on the Henrietta van and all the tires on the Randleman van revealed that the tires were drying out and that the rubber was rotting and cracking. These conditions can lead to tire failure. The sidewall and tread groove cracking on the tires of both vans was evidence of this degradation due to weather.

None of the Henrietta or Randleman tires were inflated to the recommended pressure, even though the manufacturer-recommended pressures were specified on a label inside the driver's doorsill. The two front tires on the Henrietta van were inflated to 60 psi; the recommended pressure was 55 psi. The right rear tire on the Henrietta van was inflated to 58 psi; the preaccident pressure of the left rear tire could not be determined. However, given that three of the four tires on the Henrietta van were inflated to or near 60 psi and the words "reinflate to 60 psi" were written on the right front tire in yellow crayon, the left rear tire was also probably inflated to about 60 psi. Thus, the two rear tires were significantly under the manufacturer's recommended pressure of 80 psi. On the Randleman van, the left and right front tires were inflated to 62.5 psi and 60.5 psi, respectively, and the right rear tire was inflated to 60 psi. Again, the preaccident pressure on the left rear tire could not be determined but is likely to have been about 60 psi, as was true of the other three tires. The manufacturer-recommended tire pressures for the Randleman van were 50 psi for the front tires and 80 psi for the rear tires.

Overinflated tires can result in excessive tire wear to the center of the tread. Underinflation can shorten a tire's life and lead to premature tire failure. According to NHTSA, "When a tire is used while significantly underinflated, its sidewalls flex more and the air temperature inside the tire increases, increasing stress and the risk of failure. In addition, a significantly underinflated tire loses lateral traction, making handling more difficult."[2]

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[2] Docket No. NHTSA 2000-8572.

Underinflated tires are also able to carry less weight. In the case of the tires on the accident vehicles, when inflated to a pressure of 60 psi, each rear tire could carry almost 500 pounds less than it was designed to carry had it been inflated to the manufacturer's recommended pressure of 80 psi.

Neither the degradation of the tires from weather nor the underinflated pressure of the left rear tire by itself is likely to have caused the tire failure on either van. Nonetheless, they were contributory factors. Also, a small hole extending through all the tire components of the Henrietta tire may have allowed air to penetrate the tire, thereby degrading its structural integrity. The Safety Board concludes that a combination of underinflation, degradation from weather, and, in the case of the Henrietta van tire, a possible infiltration of air through a small puncture, is likely to have led to the rapid air loss and tread/belt separation on both the Henrietta and the Randleman left rear tires.

In addition, the right rear tire on the Randleman van was underrated for the accident vehicle, that is, the tire could not carry the maximum load required for the vehicle. An underrated tire flexes too much and can lead to failure. The required tire rating is printed in the owner's manual and can also be found on the tire. A replacement tire should always have the same or greater load rating as the original. The owner could provide no information on why an underrated tire had been placed on the Randleman van.

Both accident vehicles had undergone recent State safety inspections; the Henrietta van passed a Texas inspection on October 23, 2000, and the Randleman van passed a Virginia inspection in December 2000. The Texas criteria included visual inspection of tire pressure, as well as identification of tread or sidewall cracks and cuts or snags of more than 1 inch that were deep enough to expose the body cords. The Virginia criteria included checking for cuts in tire fabric, for wear so extensive that the fabric or steel cord is visible, and for knots or bulges in the sidewalls, broken belts, or tread separation from the fabric. Neither State's criteria included excessive cracking and weather checking, a defect on five of the eight tires on the two accident vehicles. Nor did either State require inspectors to make sure that proper load-rated tires were on the vehicle or that tires were inflated to the manufacturer-recommended pressure. While none of these conditions alone was responsible for the tire failures in these accidents, the weather checking and underinflation were contributory factors, and the improperly rated tire on the Randleman accident van could have created an unsafe condition.

The American Association of Motor Vehicle Administrators inspection handbook recommends that vehicle inspections include measuring tire pressure and, as necessary, correcting deficiencies if the owner agrees. The guidelines do not address weather checking and cracking as criteria for rejection during an inspection. The Safety Board concludes that the Texas and Virginia safety inspection criteria, which do not adequately address tire pressure, overlook an important factor in vehicle safety inspection and that the Texas, Virginia, and American Association of Motor Vehicle Administrators guidelines for vehicle safety inspections are not thorough enough because they exclude factors such as weather checking and tire rating. The Safety Board believes that Texas and Virginia should require that all passenger vehicle inspections include (1) tire pressure measurement and correction of any inflation deficiencies detected and (2) identification and failure of those tires that exhibit extensive weather checking and deterioration or that are not properly load-rated.

Therefore, the National Transportation Safety Board recommends that the Commonwealth of Virginia:

> Establish a driver's license endorsement for 12- and 15-passenger vans that adopts the standards established by the American Driver and Traffic Safety Education Association; to obtain the endorsement, drivers should have to complete a training program on the operation of 15-passenger vans and pass a written and skills test. (H-03-19)
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> Require that all passenger vehicle inspections include (1) tire pressure measurement and correction of any inflation deficiencies detected and (2) identification and failure of those tires that exhibit extensive weather checking and deterioration or that are not properly load-rated. (H-03-20)

The Safety Board also issued safety recommendations to the National Highway Traffic Safety Administration, the Federal Motor Carrier Safety Administration, the other 49 States and the District of Columbia, the American Driver and Traffic Safety Education Association, the American Automobile Association, the National Safety Council, the American Association of Motor Vehicle Administrators, Ford Motor Company, and General Motors Corporation. In your response to this letter, please refer to Safety Recommendations H-03-19 and -20. If you need additional information, you may call (202) 314-6177.

Chairman ENGLEMAN, Vice Chairman ROSENKER, and Members GOGLIA, CARMODY, and HEALING concurred in these recommendations.

By: Ellen G. Engleman
Chairman

SR

National Transportation Safety Board

Washington, D.C. 20594

Safety Recommendation

Log: H-028D

Date: AUG 4 2003

In reply refer to: H-03-19 and -20

Honorable Rick Perry
Governor
State of Texas
State Capitol
Post Office Box 12428
Austin, Texas 78711

The National Transportation Safety Board is an independent Federal agency charged by Congress with investigating transportation accidents, determining their probable cause, and making recommendations to prevent similar accidents from occurring. We are providing the following information to urge your State to take action on the safety recommendations in this letter. The Safety Board is vitally interested in these recommendations because they are designed to prevent accidents and save lives.

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On May 8, 2001, about 8:57 a.m., central daylight time, a 1993 Dodge 15-passenger van was eastbound on U.S. Route 82 near Henrietta, Texas, en route from Burkburnett, Texas, to an outlet mall in Gainesville, Texas. The driver and 11 passengers, all members of the First Assembly of God Church, occupied the van. As the vehicle approached milepost 538 in the left lane, at a calculated speed of 61 to 67 mph, the left rear tire experienced a tread separation and blowout; subsequently, the van departed the roadway and rolled over at least two times in the median, ejecting seven passengers before coming to final rest. The driver and three of the ejected passengers sustained fatal injuries, and eight passengers sustained serious injuries.

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On July 1, 2001, about 2:30 p.m., eastern daylight time, a 1989 Dodge Ram 15-passenger van was northbound in the left lane on U.S. Route 220, near Randleman, North Carolina, en route from Myrtle Beach, South Carolina, to Roanoke, Virginia. The van, owned by Virginia Heights Baptist Church of Roanoke, Virginia, was occupied by the driver and 13 passengers, ages 13 to 19. As the vehicle approached the Level Cross, North Carolina, exit, at a witness-estimated speed of 65 mph, the left rear tire experienced a tread separation and blowout; subsequently, the van moved from the left lane into the right lane, then back into the left lane, where it overturned and came to rest in the travel lanes. During the accident sequence, four passengers were ejected, one of whom was fatally injured and three of whom sustained serious injuries; the driver and the other nine passengers sustained injuries ranging from none to serious.

The National Transportation Safety Board determined that the probable cause of the accidents was tire failure, the drivers' response to that failure, and the drivers' inability to maintain control of their vans. Contributing to the accidents was the deteriorated condition of the tires, as a result of the churches' lack of tire maintenance, and the handling characteristics of the vans. Contributing to the severity of the injuries was the lack of appropriate *Federal Motor Vehicle Safety Standards* applicable to 15-passenger vans in the areas of restraints and occupant protection.

The National Highway Traffic Safety Administration's (NHTSA's) study on *The Rollover Propensity of Fifteen-Passenger Vans* demonstrated that 15-passenger vans are inherently unstable when loaded to the level for which they are designed—carrying more than 10 passengers. NHTSA therefore advises all van drivers to obtain specific training on the handling and operation of these vehicles. However, as investigators found during the Henrietta and Randleman accident investigations, the van owners were not aware of the information provided by NHTSA in its consumer advisory. The advisory has not reached all 15-passenger van operators, even those within the target group, such as churches, and the Henrietta and Randleman operators did not know that they should have specific training to operate the vans safely. Both accident drivers had experience operating 15-passenger vans, but no specialized training on the handling and driving characteristics of these vehicles; neither driver was able to control the van in an emergency.

As shown in the testing by Standards Testing Laboratories, Inc., and Safety Board staff, the van was controllable during an anticipated blowout, and the test driver thought that the effort required to control the vehicle was within the range of an unimpaired driver. The professional test driver also stated that the van was more difficult to control at higher speeds, particularly with lower tire inflation pressures, and that steering inputs were magnified after the blowout. The test driver had experience operating 15-passenger vans during a blowout, and he triggered the tire blowout himself, so the situation was not unexpected, as it was during the accidents.

While both accident drivers were familiar with their respective vans and had driven them previously, investigators did not find evidence that either driver had experienced an emergency situation, such as tire failure, while operating the van. Both drivers are likely to have overcorrected and braked following the blowout because they did not know how to respond appropriately to the vehicle dynamics that occurred after the blowout and did not understand the potential instability problems associated with 15-passenger vans. The drivers are likely to have reacted instinctively by attempting to correct the rotation of the van while braking to slow it. Had

the two drivers maintained their speed, not applied the brakes, and exerted more controlled steering, as the professional driver did during the tests, they may have been able to control their vans. Braking, the likely response on the part of both drivers, can lead to further vehicle instability during a tire failure, particularly in a fully loaded 15-passenger van with a high, rearward center of gravity. The drivers' lack of training on their vehicles' operating and handling characteristics, particularly in emergency situations, put them at a disadvantage in reacting to the blowout.

As the National Safety Council, the American Automobile Association, and most driver education programs recognize, acceleration is the appropriate response to a blowout, but that response is counterintuitive to the general public. Therefore, such groups emphasize that drivers need to refrain from braking and to decelerate slowly in the event of a tire blowout. This strategy requires that the driver provide steering input to counteract the lateral dragging force created by the blown tire. If a driver brakes, the lateral steering force experienced by the vehicle is greater and the driver must provide more steering input to maintain control of the vehicle. If the driver provides too much steering input, he or she will have to try to correct the direction of the vehicle and may oversteer. When the vehicle has a high, rearward center of gravity, as a loaded 15-passenger van does, the rapid changes in steering direction can lead to instability and rollover. A similar driver reaction to a blowout in a passenger car is unlikely to have such severe consequences because the passenger car's lower center of gravity makes it more forgiving of inappropriate driver inputs.

Impressing upon 15-passenger van drivers the inherent dangers of operating these vehicles, particularly when fully loaded, and educating them about proper handling and control, particularly during emergency situations, can reduce the risk of rollover. Such training can also help dispel the expectation that these vans operate like large passenger cars. While the accident drivers had experience operating the vans, they did not have experience with how the vehicles would respond in this type of emergency situation or other emergency situations or the consequences of their instinctive reactions to such situations. Educating drivers on how such vehicles respond to, and on the consequences of, different driver input could help operators approach 15-passenger van driving more cautiously.

In addition, training would provide a forum for educating drivers about the tire pressures and maintenance required for 15-passenger vans. The rear tires on a fully loaded van, for instance, must be inflated to 80 pounds per square inch (psi), which is much higher than the rear tire pressure for most passenger cars. Stressing the importance of proper tire inflation during training will help drivers avoid potential problems. Drivers should also be taught to check the tires and tire pressure before driving the vehicle. In both these accidents, the tires were in very poor condition, which should have been readily apparent to someone who knew to look for cracks and rotting rubber.

To ensure that drivers have the necessary skills to operate vehicles other than passenger vehicles, States have established classes of driver's licenses, for example, a commercial driver's license, a motorcycle license, or a chauffeur's endorsement, that require specialized training and testing. No such class of license exists for 15-passenger vans. Yet, as NHTSA has acknowledged, 15-passenger van operators need training in the handling of those vehicles, and testing has demonstrated that controlling 15-passenger vans in a blowout is possible for a trained

driver. The Safety Board concludes that safe operation of 15-passenger vans requires a knowledge and skill level different from and above that for passenger vehicles, particularly when the vans are fully loaded or drivers experience an emergency situation. The Safety Board has recommended that the American Driver and Traffic Safety Education Association, in cooperation with NHTSA, the National Safety Council, the American Automobile Association, Ford Motor Company, and General Motors Corporation, develop a training program for 12- and 15-passenger van drivers. The Safety Board believes that the States and the District of Columbia should establish a driver's license endorsement for 12- and 15-passenger vans that adopts the standards established by the American Driver and Traffic Safety Education Association; to obtain the endorsement, drivers should have to complete a training program on the operation of 12- and 15-passenger vans and pass a written and skills test.

Two of the Henrietta van's four tires, including the tire that suffered the tread/belt separation, were original tires (8 years old). Three of the four tires on the Randleman van were more than 8 years old. When not in use, both vans had been parked in the unprotected parking lots of their respective churches since purchase. The tires were subject to the ozone and ultraviolet light present outdoors, which can degrade the tire rubber, leading to dry rot and weather checking. These phenomena are typical of a sedentary vehicle; during normal use, anti-degradants introduced during the tire manufacturing process are released and brought to the surface of the tire. When a vehicle is not driven extensively (the Henrietta van averaged 5,500 miles per year and the Randleman van averaged about 7,000 miles per year), this release does not occur. Visual inspection of the two original tires on the Henrietta van and all the tires on the Randleman van revealed that the tires were drying out and that the rubber was rotting and cracking. These conditions can lead to tire failure. The sidewall and tread groove cracking on the tires of both vans was evidence of this degradation due to weather.

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[2] Docket No. NHTSA 2000-8572.

Underinflated tires are also able to carry less weight. In the case of the tires on the accident vehicles, when inflated to a pressure of 60 psi, each rear tire could carry almost 500 pounds less than it was designed to carry had it been inflated to the manufacturer's recommended pressure of 80 psi.

Neither the degradation of the tires from weather nor the underinflated pressure of the left rear tire by itself is likely to have caused the tire failure on either van. Nonetheless, they were contributory factors. Also, a small hole extending through all the tire components of the Henrietta tire may have allowed air to penetrate the tire, thereby degrading its structural integrity. The Safety Board concludes that a combination of underinflation, degradation from weather, and, in the case of the Henrietta van tire, a possible infiltration of air through a small puncture, is likely to have led to the rapid air loss and tread/belt separation on both the Henrietta and the Randleman left rear tires.

In addition, the right rear tire on the Randleman van was underrated for the accident vehicle, that is, the tire could not carry the maximum load required for the vehicle. An underrated tire flexes too much and can lead to failure. The required tire rating is printed in the owner's manual and can also be found on the tire. A replacement tire should always have the same or greater load rating as the original. The owner could provide no information on why an underrated tire had been placed on the Randleman van.

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The American Association of Motor Vehicle Administrators inspection handbook recommends that vehicle inspections include measuring tire pressure and, as necessary, correcting deficiencies if the owner agrees. The guidelines do not address weather checking and cracking as criteria for rejection during an inspection. The Safety Board concludes that the Texas and Virginia safety inspection criteria, which do not adequately address tire pressure, overlook an important factor in vehicle safety inspection and that the Texas, Virginia, and American Association of Motor Vehicle Administrators guidelines for vehicle safety inspections are not thorough enough because they exclude factors such as weather checking and tire rating. The Safety Board believes that Texas and Virginia should require that all passenger vehicle inspections include (1) tire pressure measurement and correction of any inflation deficiencies detected and (2) identification and failure of those tires that exhibit extensive weather checking and deterioration or that are not properly load-rated.

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

Establish a driver's license endorsement for 12- and 15-passenger vans that adopts the standards established by the American Driver and Traffic Safety Education Association; to obtain the endorsement, drivers should have to complete a training program on the operation of 12- and 15-passenger vans and pass a written and skills test. (H-03-19)

Require that all passenger vehicle inspections include (1) tire pressure measurement and correction of any inflation deficiencies detected and (2) identification and failure of those tires that exhibit extensive weather checking and deterioration or that are not properly load-rated. (H-03-20)

The Safety Board also issued safety recommendations to the National Highway Traffic Safety Administration, the Federal Motor Carrier Safety Administration, the other 49 States and the District of Columbia, the American Driver and Traffic Safety Education Association, the American Automobile Association, the National Safety Council, the American Association of Motor Vehicle Administrators, Ford Motor Company, and General Motors Corporation. In your response to this letter, please refer to Safety Recommendations H-03-19 and -20. If you need additional information, you may call (202) 314-6177.

Chairman ENGLEMAN, Vice Chairman ROSENKER, and Members GOGLIA, CARMODY, and HEALING concurred in these recommendations.

By: Ellen G. Engleman
Chairman