



NTSB National Transportation Safety Board

FMCSA Motor Carrier Safety Advisory Committee

Debbie Hersman

September 13, 2007

NTSB

- Independent Federal Agency
- 5 Member Board
 - President appointed
 - Senate confirmed
- 400 Staff
- Investigates accidents in all modes of transportation
- Determine probable cause
- Issue recommendations

How We Pick Accidents

- 19,000 accidents per day
- 7,638 people injured in highway accidents a day
- 43,443 fatalities in 2005
- We can only launch on 5-6 major accidents each year
- 2 teams of 6-8 investigators
- Thorough, comprehensive investigations



How We Pick Accidents

4 basic criteria in selecting accidents for investigation.

1. Is there high public interest?
2. Have we done it before?
3. Can we make a difference?
4. Do we have the resources?

How We Pick Accidents

- Always looking for new nation-wide safety issues that other highway safety organizations have not addressed.
- We cannot implement a change directly, but we can be the catalyst for change through others.

Accident Reports

Motorcoach Fire on Interstate 45
During Hurricane Rita Evacuation
Near Wilmer, Texas
September 23, 2005



National
Transportation
Safety Board

ACCIDENT REPORT

NTSB/HAR-07/01
PB2007-916202

NTSB



Safety Recommendations



National Transportation Safety Board

Washington, D.C. 20594

Safety Recommendation

Date: February 26, 1999

In reply refer to: H-99-4a through -8

Honorable Rodney E. Slater
Secretary
U.S. Department of Transportation
Washington, D.C. 20590

The National Transportation Safety Board investigated two accidents in 1995 and 1997 that are typical of the motorcoach accidents that it has investigated over the years.¹ On October 15, 1995, a 1989 Eagle motorcoach operated by Hammond Yellow Coach Line, Inc., (Hammond) and occupied by a driver and 39 members of a high school booster club overturned when it entered an Interstate (I)-70 exit ramp in Indianapolis, Indiana. Two passengers sustained fatal injuries, 13 sustained serious injuries, and 26 received minor injuries.

On July 29, 1997, a 1985 TMC (Transportation Manufacturing Corporation) motorcoach operated by Rite-Way Transportation, Inc., (Rite-Way) and occupied by a driver and 34 members of the Pathways to Freedom tour group drifted off the side of I-95 near Stony Creek, Virginia, and down an embankment into the Nottoway River, where it came to rest on its left side. One passenger sustained fatal injuries, the driver and 3 passengers sustained serious injuries, and 28 passengers sustained minor injuries.

These accidents involved factors that the Safety Board has repeatedly identified as issues in accidents and that have the potential for catastrophic consequences, namely driver fatigue and poorly maintained or out-of-adjustment brakes. The Stony Creek accident also highlighted the need for motorcoach passengers to receive pretrip safety information, such as the emergency evacuation briefing presently required for commercial air passengers.

The motorcoach drivers in both of these accidents had exhibited signs of fatigue. The Safety Board identified several factors that probably put the Hammond busdriver at risk for fatigue, primarily the time of day and the length of time that he had been awake, on duty, and driving. The accident occurred at a time of day when he normally was asleep or preparing to go to sleep. At the time of the crash, he was nearing the end of his allowable duty cycle. He had been awake for 16.5 hours and on duty for about 11 hours, during which he had driven for 7.5 hours. Had he completed his trip, he probably would have exceeded the hours-of-service rules.

¹For additional information, refer to Special Investigation Report—*Selective Motorcoach Issues* (NTSB/SIR-99/01).

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Safety Recommendations

Issued Since 1967

TOTAL = 12,690

Pipeline 1235 9.73%



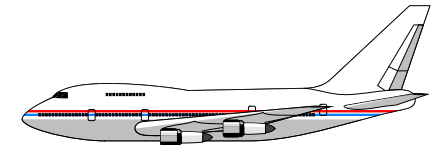
Railroad 2073
16.34%



Marine 2317
18.26%



Aviation
4726 37.24%



Intermodal 234 1.84%



Highway 2105 16.59%



September 7, 2007

926 Open Recommendations

- **Aviation: 426**
- **Highway: 271**
- **Railroad: 108**
- **Marine: 68**
- **Pipeline: 31**
- **Intermodal: 22**

September 7, 2007

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Most Wanted List

Actions needed by States

HIGHWAY

Improve Child Occupant Protection

- Enact State laws requiring booster seats for young children.

Enact Primary Seat Belt Enforcement Laws

- Increase the number of people who wear seat belts through stronger enforcement laws.

Promote Youth Highway Safety

- Enact graduated driver licensing legislation.
- Restrict the number of teen passengers traveling with young novice drivers.
- Prohibit use of wireless communications devices by young novice drivers.

Eliminate Hard Core Drinking Driving

- Enact State legislation and take other actions that are proven to reduce crashes involving those who repeatedly drink large amounts of alcohol and drive including:
 - Frequent, statewide sobriety checkpoints.
 - Legislation to create stricter sanctions for those arrested the first time with a high blood alcohol concentration of 0.15 or higher.
 - Zero blood alcohol requirement for convicted DWI offenders when they get their license back.
 - Administrative rather than court-based license revocation for refusing to take or failing the sobriety test.
 - Vehicle sanctions for DWI offenders.
 - Eliminate plea-bargaining DWI offenses and programs that divert offenders and purge the offense record.
 - Retain DWI records for at least 10 years to identify and prosecute repeat offenders.
 - Develop and operate special sanction court-based programs for hard core DWI offenders.

Improve School Bus/Grade Crossing Safety

- Install stop signs at passive crossings.
- Upgrade school bus railroad crossings that only have warning signs to crossings with lights and gates.
- Install switches on new buses that allow drivers to turn off radios and other devices that mask the sound of train warning horns.
- Enhance bus driver training and evaluation.
- Include grade crossing questions on commercial driver's license exams.

MARINE

Enhance Recreational Boating Safety

- Require mandatory education of boat operators.
- Require use of life jackets by children.
- Require safety instruction prior to personal watercraft rental.

November 2006



NTSB MOST WANTED

Transportation Safety Improvements




2007

*Critical changes needed to reduce
transportation accidents and save lives.*

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Action/Timeliness Criteria

-  **Red:** Unacceptable response
-  **Yellow:** Acceptable response – progressing slowly
-  **Green:** Acceptable response – progressing in a timely manner

Improve the Safety of Motor Carrier Operations

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Safety Improvement Wanted

- Change the way safety fitness ratings are determined so adverse vehicle and driver performance alone are sufficient to result in an overall unsatisfactory rating for the carrier

H-99-6

Special Investigation Report

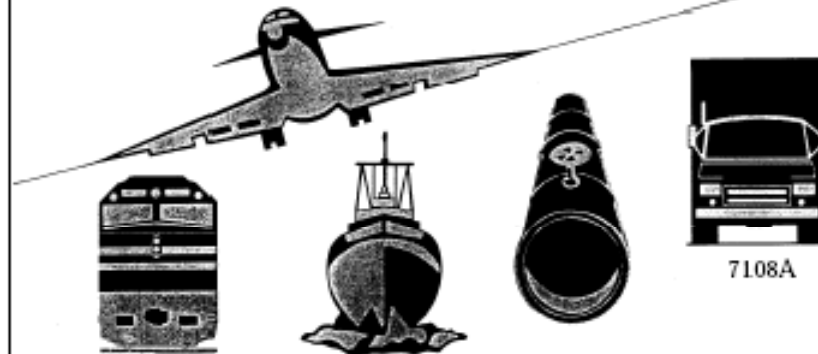
PB 99-917001
NTSB/SIR-99/01

NATIONAL TRANSPORTATION SAFETY BOARD

WASHINGTON, D.C. 20594

HIGHWAY SPECIAL INVESTIGATION REPORT

Selective Motorcoach Issues



7108A

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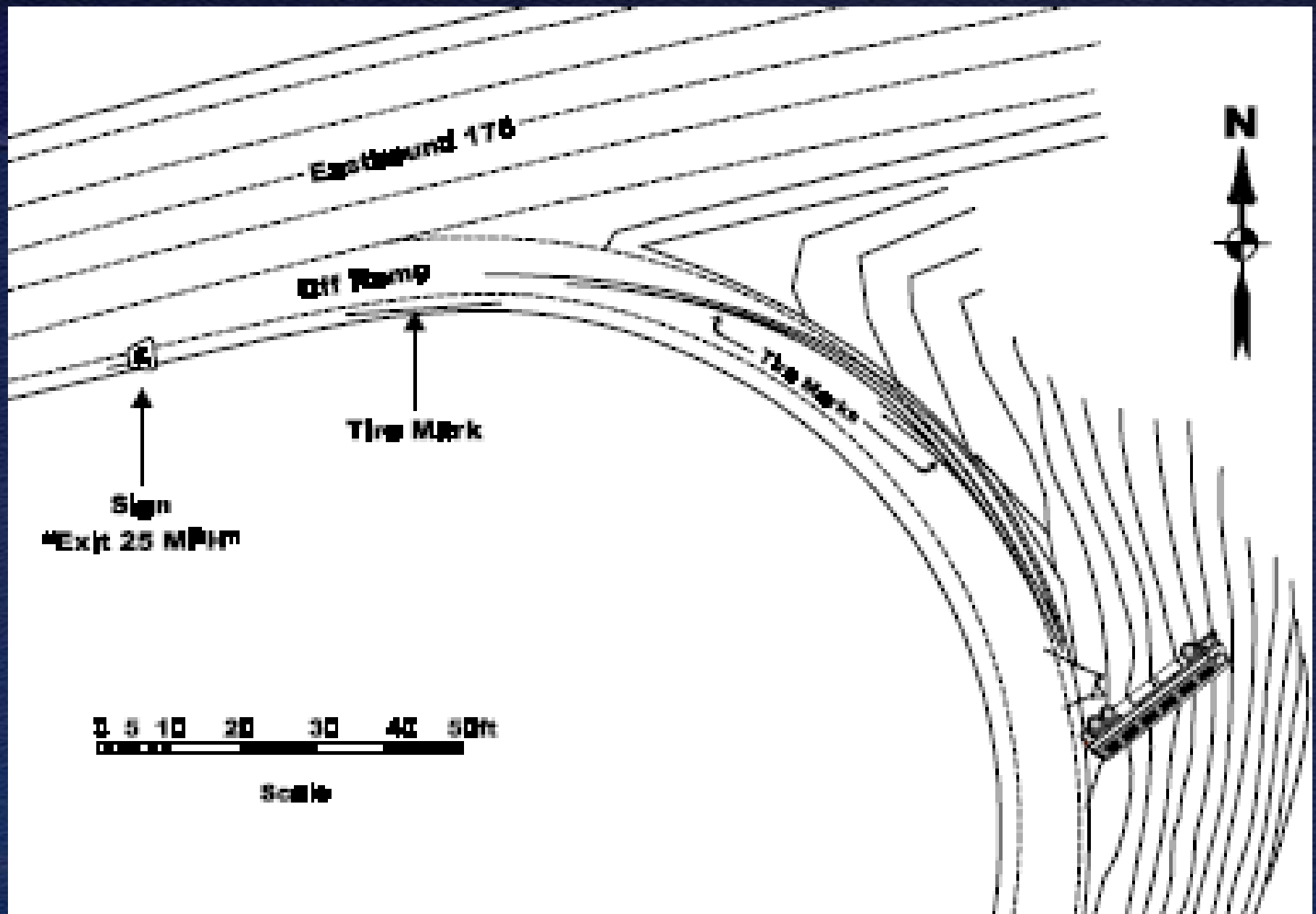


Indianapolis, IN: 1995



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Schematic of Indianapolis Accident Scene







Date	Rating	Notes
09/22/87	Satisfactory	Review at carrier's request due to a prior enforcement action
10/25/88	No rating/violations on vehicles operating in commercial zone	Initiated because of congressional complaint
02/06/90	Conditional	Initiated because of complaint regarding hours-of-service violations
07/31/91	No rating	Initiated because of complaint/enforcement action underway
07/02/92	Conditional	Follow-up review due to prior enforcement action
11/13/92	Conditional	Initiated because of complaint regarding push-out windows
09/30/93	Unsatisfactory	Due to accident rate and hours-of-service violations
12/17/93	Satisfactory	45-day follow-up review. Maintenance program moderately deficient/mechanics have not promptly repaired safety-related defects
June 22, 1994, Indiana police inspection places 100 percent of the 11 vehicles reviewed out of service.		
09/14/94*	Satisfactory	High percentage of vehicles out-of-service [63 percent]
October 15, 1995, Indianapolis Accident Occurs		
11/01/95	Unsatisfactory	Postaccident compliance review. The OMC places 10 of 10 vehicles reviewed out of service.
11/20/95		Out-of-service order as a result of noncompliance within 45 days of the proposed unsatisfactory safety rating
*An Indiana State police inspection also occurred.		

Motor Carrier Compliance Reviews of Hammond from 1987 to 1995

Stony Creek, VA: 1997



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ACCIDENT
Stony Creek, VA



Figure 7-Destination Map

Route of the "Pathways to Freedom" Tour



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Date	Rating	Comments/Deficiencies *
12/15/93	Conditional	<ul style="list-style-type: none"> - failure to have some driver qualification records - failure to have accurate duty status records - failure to conduct preemployment and random drug tests
4/21/95	Conditional	<ul style="list-style-type: none"> - failure to comply with driver "hours of service" rules (49 CFR 395) - failure to have complete employment applications - use of an unqualified driver - failure to complete a pre-employment background check - use of a motorcoach that had not received its annual inspection - failure to have some driver qualification records - failure to conduct random drug tests on 50 percent of drivers
4/26/96	Satisfactory	<ul style="list-style-type: none"> - failure to fully comply with drug testing requirements - use of a motorcoach that had not received its annual inspection
Postaccident 7/31/97	Satisfactory	<ul style="list-style-type: none"> - failure to perform annual vehicle inspections - failure to conduct random alcohol tests - failure of driver to record hours of service while driving on local charter tours (minor violations)
* The company was fined for the violations noted during each review.		

Motor Carrier Compliance Reviews of Rite-Way from 1993 to 1997

Motor Carrier Fitness Safety Ratings

Safety Fitness Factors

- General
- Drivers
- Operations
- Vehicles
- Hazardous Materials
- Accidents

Motor Carrier Fitness Safety Ratings

Accident Factors

- General
- **Drivers**
- Operations
- **Vehicles**
- Hazardous Materials
- Accidents



Mountainburg, AR: 2001



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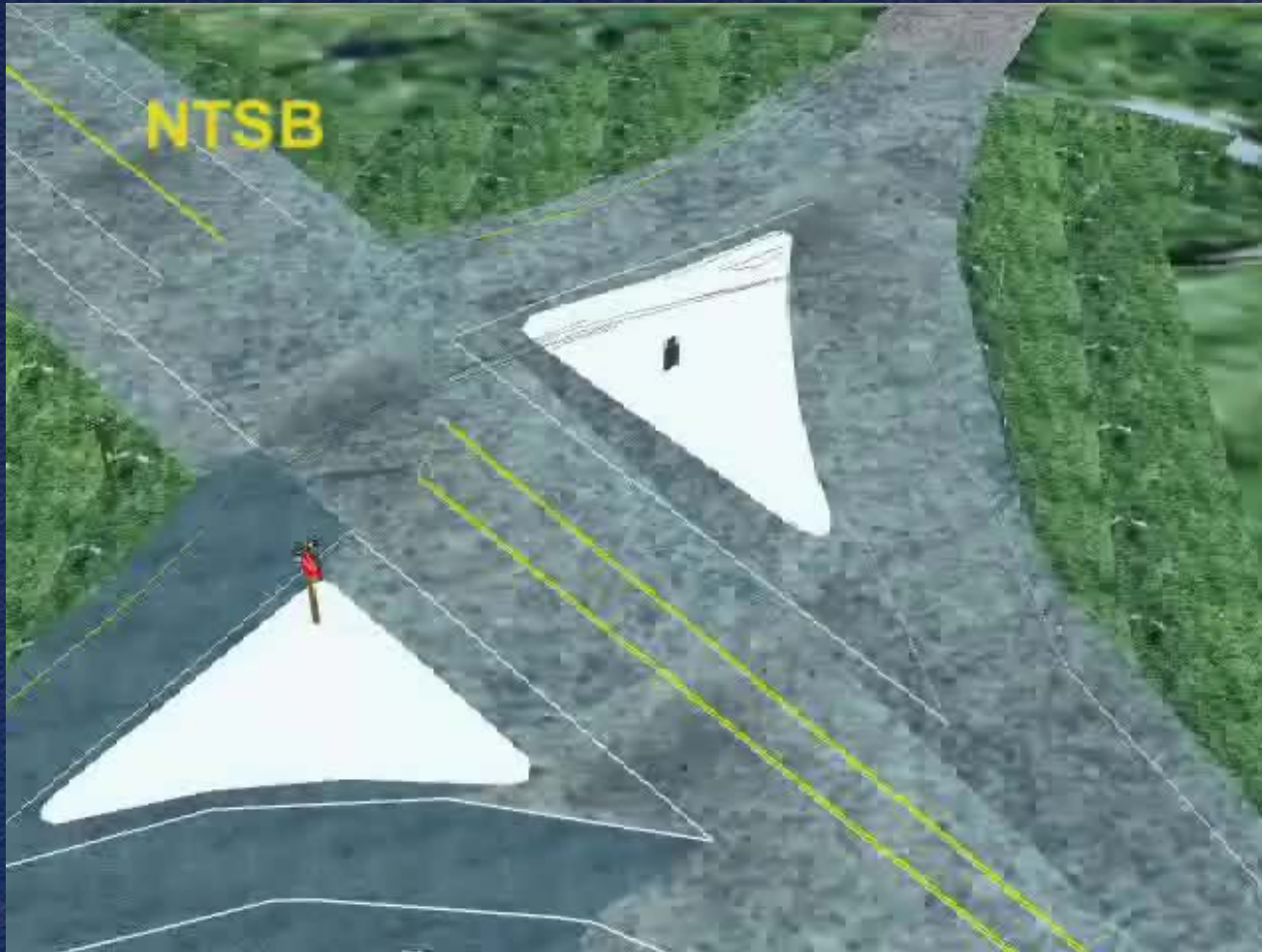


Source: Arkansas State Police



Source: Arkansas State Police

Mountainburg, AR (Animation: Overhead View)



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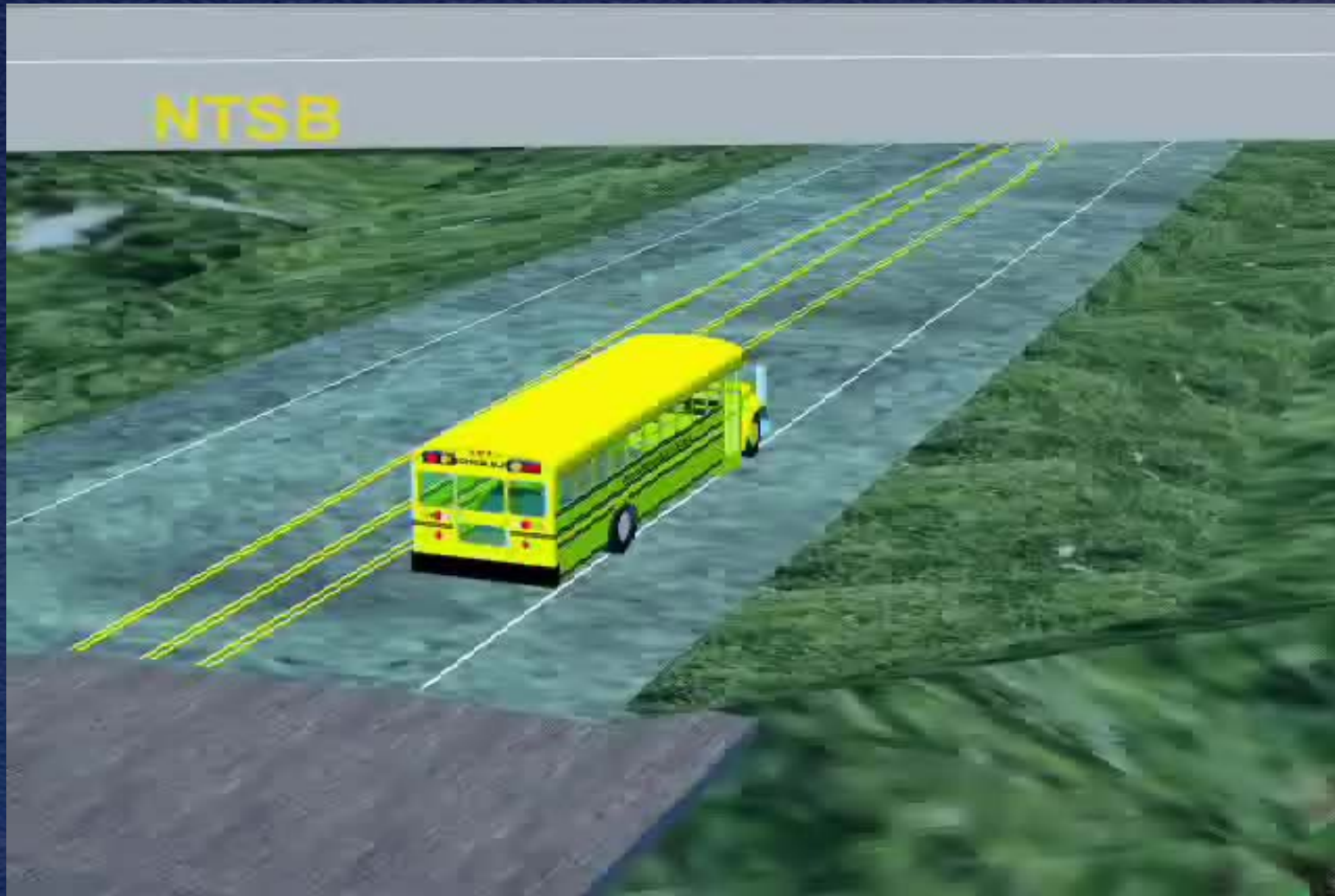
Mountainburg, AR (Animation: Truck Chase View)



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Mountainburg, AR (Animation: Bus Chase View)



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Source: FMCSA personnel at Ft. Smith, Arkansas

Wilmer, TX: 2005



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Houston

Galveston

Path of Hurricane Rita

Landfall in Texas September 23

Path of Hurricane Katrina

August 2005

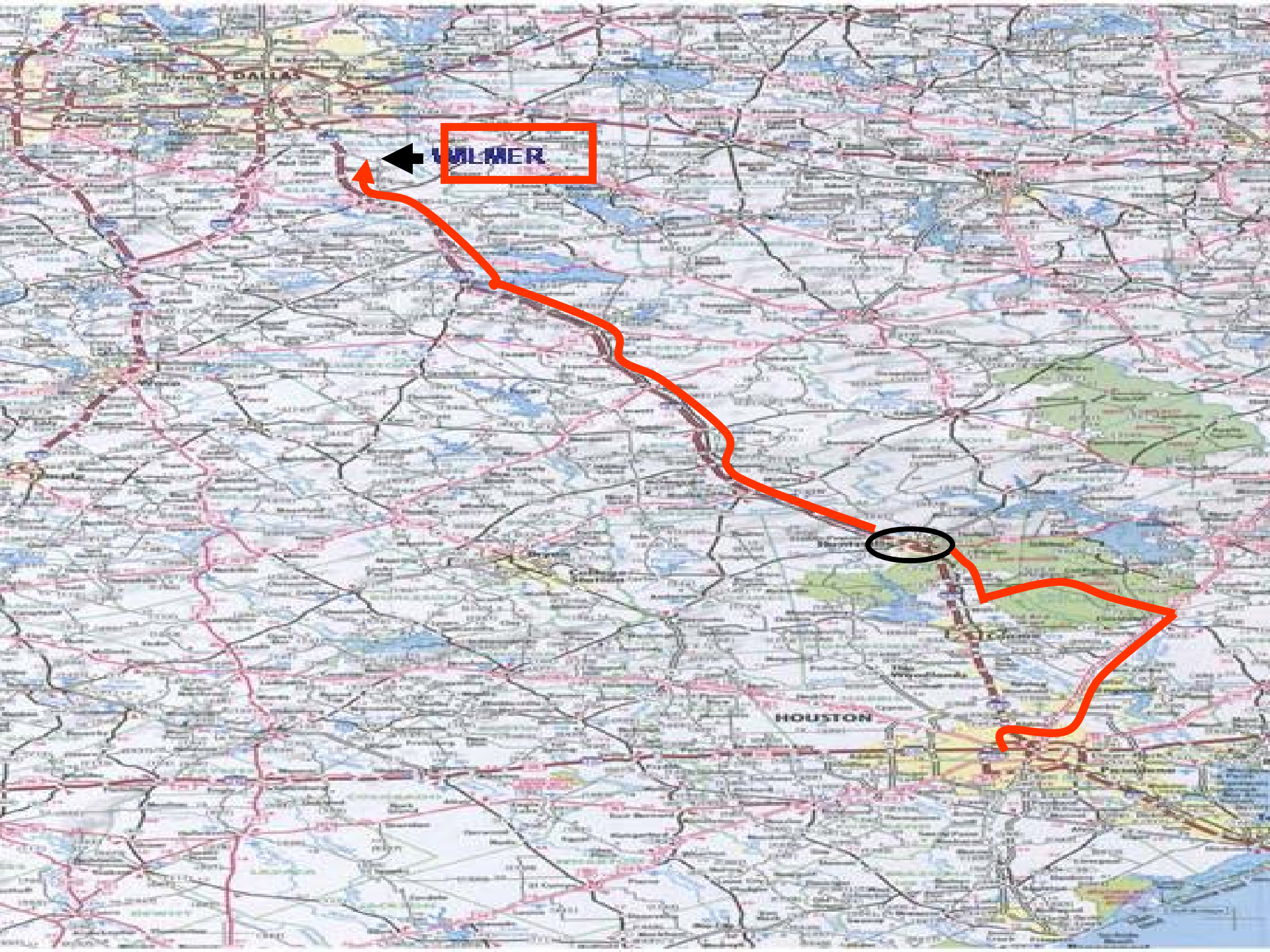
Miami

Gulf of Mexico

MEXICO

CUBA





WILMER

HOUSTON

DALLAS











EXIT
269
Mars
Rd ↗

EXIT
30
MPH





Burned grass on right shoulder



Source: Dallas County
Sheriff's Dept.

00:10



Source: KTVT News

00:23



Source: KTVT News

00:27



Source: KTVT News

00:50



Source: KTVT News

01:33



Source: KTVT News

02:34

Source: KTVT News



05:17



Source: KTVT News

06:30



Source: KTVT News



Damaged oxygen cylinders from the passenger compartment



Oxygen cylinders from the luggage compartment

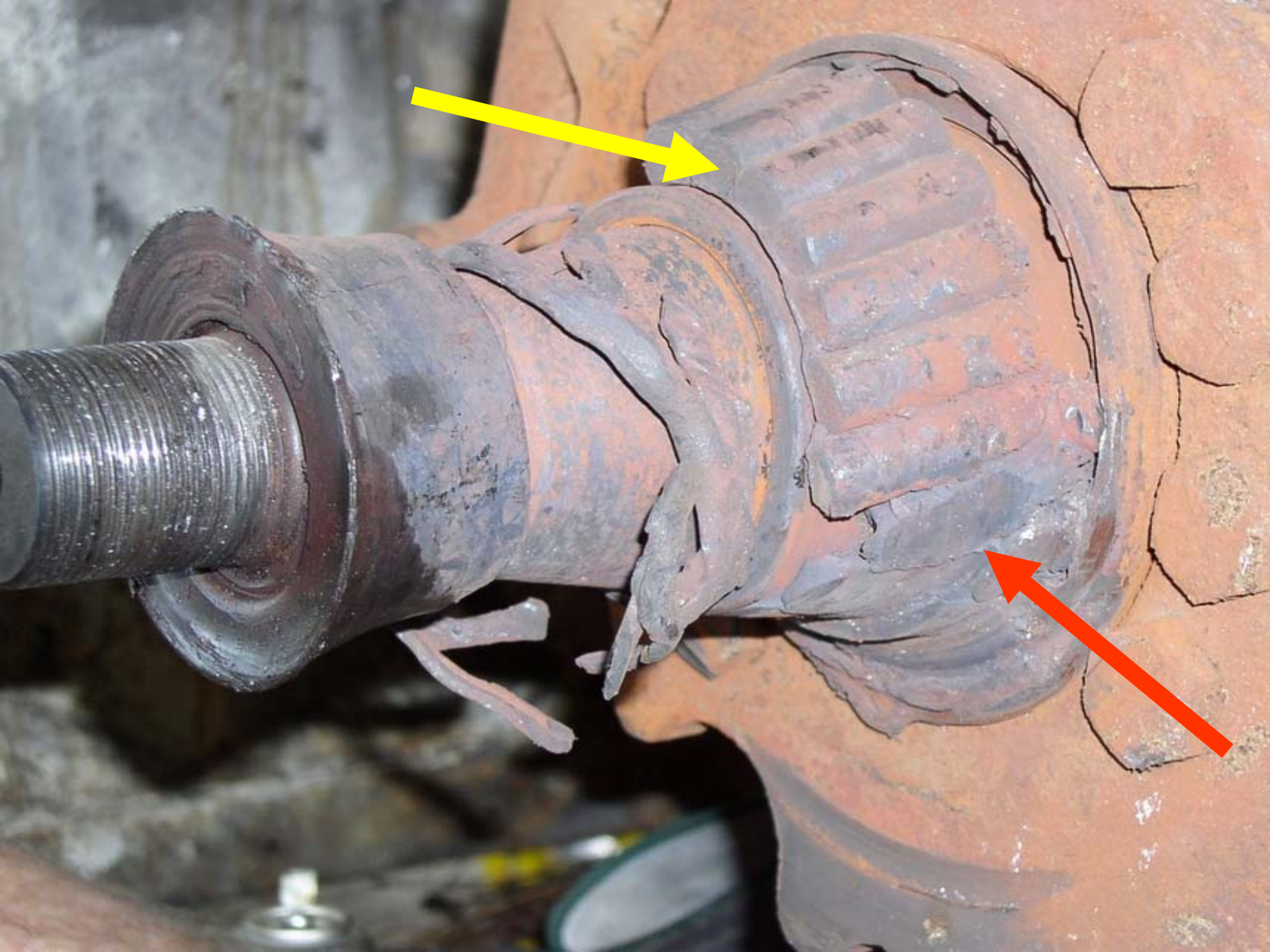


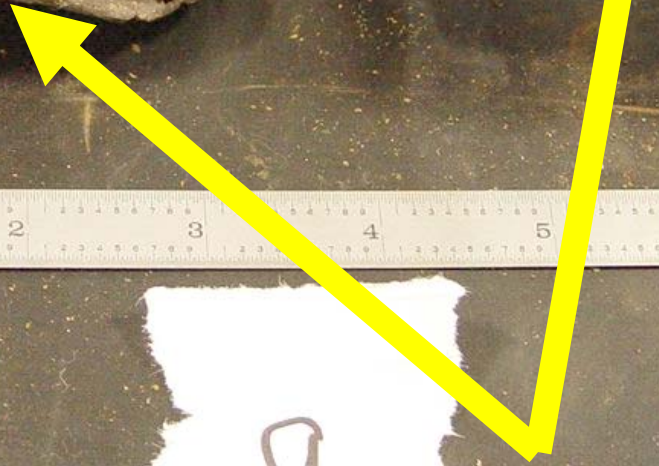




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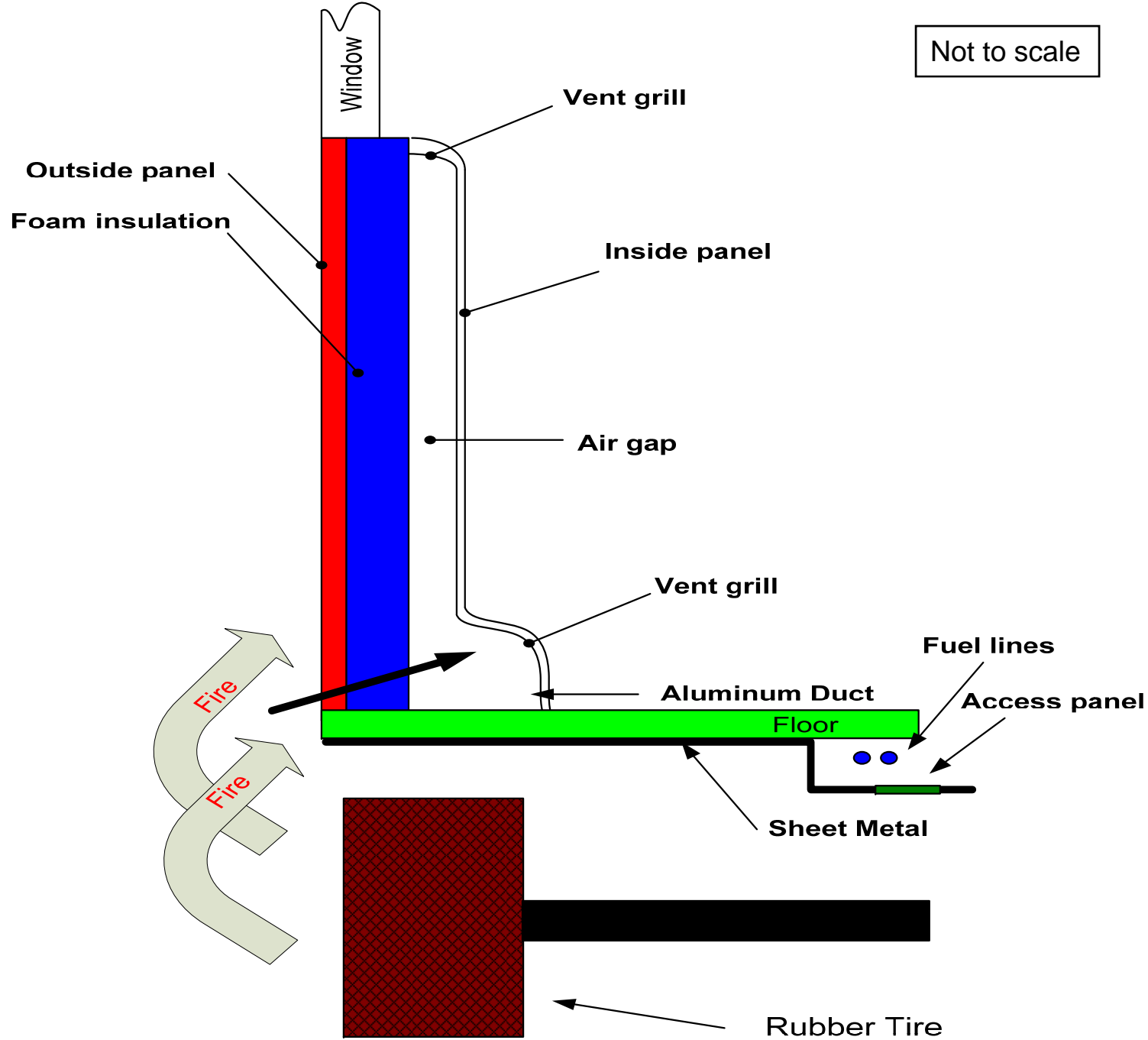






91

Not to scale



Where Are We Now?

- 2003: NPRM
- 2004: Review of SafeStat
- Current status:
“Open—Unacceptable Response”
- CSA 2010

Actions Remaining

- New performance-based operational model
- Pilot testing of new rating system in fiscal year 2008
- Continue to develop standards to measure overall safety of motor carrier operations



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www.nts.gov