Log H-566C



National Transportation Safety Board

Washington, D. C. 20594

Safety Recommendation

Date: June 26, 1992

In Reply Refer To: H-92-63

Mr. Gary Coe, President Towing and Recovery Association of America P.O. Box 916430 Longwood, Florida 32791-6430

Mr. Harold Willard, President Interstate Towing Association P.O. Box 916430 Longwood, Florida 32791-6430

In accidents investigated by the National Transportation Safety Board, numerous brake deficiencies are cited as causal or contributing factors. Although the Safety Board has recommended changes to address these recurring problems, brake system deficiencies continue to be factors in accidents. In 1989, the Safety Board began a study to determine the effectiveness of airbrake systems on heavy trucks and buses. This study focuses on brake system issues, highlights potential problems, and makes recommendations that address the systemic problems associated with heavy vehicle brake-related accidents.

Problems with unpreserved vehicle evidence prevented the Safety Board from investigating numerous accidents for this study. The Safety Board believes that this situation affects the reliability of current databases for use in quantifying accident-related brake deficiencies. Information in these databases is provided by police who respond to the accidents and who face the problem, as did the Safety Board, of towing companies backing off the springbrakes.

¹For more detailed information, read Safety Study--Heavy Vehicle Airbrake Performance (NTSB/\$S-92/01)

The Safety Board investigated 189 heavy truck accidents from 1985 through 1987² and found that brake-related evidence was often altered after an accident Investigations of 182 heavy truck accidents during 1987 and 1988 identified the same problem.³ Often, slack adjusters on some or all springbrake-equipped axles were completely "backed off," or altered, to more easily move wrecked vehicles. In some cases, investigators found that wrecker drivers were unfamiliar with the practice of "caging" springbrakes and thus unintentionally destroying valuable evidence when they altered the brake adjustment.

Therefore, the National Transportation Safety Board recommends that the Towing and Recovery Association of America and the Interstate Towing Association:

Encourage members to voluntarily discontinue the practice of "backing off" the airbrakes on commercial vehicles during wreckage removal operations. (Class II, Priority Action) (H-92-63)

Also as a result of this study, the Safety Board issued Safety Recommendations H-92-50 through -55 to the National Highway Traffic Safety Administration, H-92-56 through -59 to the Federal Highway Administration, H-92-60 through -62 to the 50 States and the District of Columbia, H-92-64 through -68 to the National Private Truck Council, H-92-69 through -73 to the Owner-Operator Independent Drivers Association, H-92-74 through -78 to the American Trucking Associations, H-92-79 and -80 to the Motor Vehicle Manufacturers Association, H-92-81 to the Professional Truck Driver Institute of America, H-92-82 to the Society of Automotive Engineers, and H-92-83 and -84 to airbrake component manufacturers.

The National Transportation Safety Board is an independent Federal agency with statutory responsibility "to promote transportation safety by conducting independent accident investigations and by formulating safety improvement recommendations" (Public Law 93-633). The Safety Board is vitally interested in any action taken as a result of its safety recommendations. Therefore, it would appreciate a response from you regarding action taken or contemplated with respect to the recommendation in this letter. Please refer to Safety Recommendation H-92-63 in your reply.

²NTSB Report--Case Summaries of 189 Heavy Truck Accident Investigations, October 12, 1988 (NTSB/SS-88/05).

³NTSB Report--Fatigue, Alcohol, Other Drugs, and Medical Factors in Fatal-to-Driver Heavy Truck Crashes (Volume 2), February 5, 1990 (NTSB/SS-90/02).

⁴When air is lost in an airbrake system, a safety feature results in the mechanical application of springbrakes installed on certain air chambers. The vehicle is immovable until the brake is released by recompression of the spring. This release can be accomplished either by reapplying air to the chamber or by mechanically compressing the spring through use of a caging bolt. To release the brake, the caging bolt is inserted through the back of the springbrake housing and turned to recompress the spring. Either of the methods will preserve brake adjustment evidence.

COUGHLIN, Acting Chairman, and LAUBER, HART, HAMMERSCHMIDT, and KOLSTAD, Members, concurred in this recommendation.

By: Susan M. Coughlin Acting Chairman