Log H-566H

National Transportation Safety Board

Washington, D. C. 20594

Safety Recommendation

Date: June 26, 1992

In Reply Refer To: H-92-81

Mr. Edward E. Kynaston, President
Professional Truck Driver Institute of America
8788 Elk Grove Boulevard, Suite 20
Elk Grove, California 95624

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.[1]

Most jackknifes occur after hard braking situations in which undesirable brake system characteristics (for example, unbalanced brake torque at different axles) and roadway characteristics (wet pavement) combine to produce the rapid sequence of events leading to wheel lock-up and loss of control. All the stability-related accidents investigated for this study involved vehicles that were lightly loaded on at least the drive or trailer axles, and all but one accident took place on a wet roadway with reduced frictional qualities. To compound this problem, current Federal regulations for in-service heavy vehicles do not adequately address stability under variant load and road surface conditions, the Safety Board found.

Therefore, the National Transportation Safety Board recommends that the Professional Truck Driver Institute of America:

> Incorporate brake maintenance materials developed by the American Trucking Associations into a training curriculum

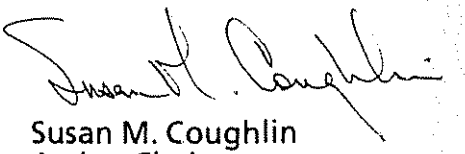
[1]For more detailed information, read Safety Study--*Heavy Vehicle Airbrake Performance* (NTSB/SS-92/01).

that cautions drivers about the instabilities of lightly loaded combination vehicles when operated on low-friction road surfaces. (Class II, Priority Action) (H-92-81)

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-92-63 to the Interstate Towing Association and to the Towing and Recovery Association of America, 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-92-82 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-92-81 in your reply.

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



By: Susan M. Coughlin
Acting Chairman