(SEE ADDRESS LIST ATTACHED) H-5/4A



## National Transportation Safety Board

Washington, D.C. 20594
Safety Recommendation

Date: April 14, 1988

In reply refer to: H-88-3

Bus Manufacturers (See Distribution List)

About 1:45 p.m. on May 4, 1987, while traveling eastbound on Interstate 10 (I-10) in Beaumont, Texas, a tractor-semitrailer operated by Graebel Van Lines, Inc., jackknifed in the center lane, veered leftward across the left lane and median strip, and struck a Trailways bus traveling westbound on I-10 in the left lane. A small fire which started in the bus below the driver's seating area was quickly extinguished by a passerby. The busdriver and 5 bus passengers sustained fatal injuries, 17 bus passengers sustained serious to minor injuries, and 6 bus passengers were not injured. The truckdriver and helper sustained moderate and minor injuries, respectively. It was raining at the time of the accident. 1/

The interior sidewall and roof of the bus were covered by a thermoplastic laminate material about 1/8 inch thick. The material shattered into sharp-edged pieces as the bus structure collapsed. Blood and hair were visible on broken laminate pieces on both sidewalls, showing evidence of occupant contact.

As a result of its investigation of a head-on collision involving an Eagle Coach intercity charter tour bus and a pickup truck in Laredo, Texas, on October 20, 1984,  $\underline{2}/$  the Safety Board recommended that the National Highway Traffic Safety Administration (NHTSA):

<sup>1/</sup> For more detailed information, read Highway Accident Report--"Tractor-Semitrailer/Intercity Bus Head-on Collision, Interstate 10, Beaumont, Texas, May 4, 1987" (NTSB/HAR-88/01).

<sup>2/</sup> For more detailed information, read Highway Field Report--"1982 Eagle Charter Coach Head-on Collision with 1983 Pickup Truck near Laredo, Texas, October 20, 1984" (NTSB-FTW-85-H-FR02).

## H-86-62

Develop a standard for intercity-type buses that requires overhead surfaces, which include roof linings, moldings, parcel or luggage shelves, edges, and support hardware, to be designed to reduce or prevent direct contact injuries in rollover and upset accidents, and that such areas resist separation or fracture of a type which would expose occupants to sharp edges.

In a letter to the Safety Board dated January 7, 1987, the NHTSA stated that it believes that the bus industry is capable of coping with the identification and redesign of "unfriendly" interiors. The NHTSA also stated that it has not identified specific significant problem areas of bus interior construction associated with passenger injuries and has no justification for rulemaking action in this area. The Safety Board classified Safety Recommendation H-86-62 as "Closed--Unacceptable Action" on March 12, 1987.

The Safety Board will continue to supply the NHTSA with specific instances of passenger injuries resulting from separations and fractures of interior moldings and sidewalls caused during accidents. Even though Safety Recommendation H-86-62 has been closed, the Safety Board considers this to be a critical issue and will continue to stress its concerns in future pertinent accident investigations and safety issues. Meanwhile, the Safety Board believes that all bus manufacturers should be made aware of these accidents and the potential for injuries caused by interior materials breaking apart.

Therefore, the National Transportation Safety Board recommends that bus manufacturers:

Use material that will minimize potential injury to passengers when lining the interiors of intercity or intracity buses. (Class II, Priority Action) (H-88-3)

Also, the Safety Board issued Safety Recommendations H-88-1 and -2 to the Federal Highway Administration; H-88-4 to the United Bus Owners of America and the American Bus Association; H-88-5 to the United Bus Owners of America, the American Bus Association, and the American Trucking Associations, Inc.; and H-88-6 to Graebel Van Lines, Inc.

The National Transportation Safety Board is an independent Federal agency with the 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 actions taken as a result of its safety recommendations and 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-88-3 in your reply.

BURNETT, Chairman, GOLDMAN, Vice Chairman, and LAUBER, NALL, and KOLSTAD, Members, concurred in this recommendation.

y: Jim Burnett Chairman

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