



National Transportation Safety Board

Washington, DC 20594

Safety Recommendation

Date: August 4, 2015

In reply refer to: H-15-12 and -13;
H-99-9, H-99-54, H-00-1
and -2, H-10-7, -14, and -15
(Reiterations)

The Honorable Mark R. Rosekind
Administrator
National Highway Traffic Safety Administration
Washington, DC 20590

On July 14, 2015, the National Transportation Safety Board (NTSB) adopted its report concerning the April 10, 2014, crash in which a Volvo truck-tractor in combination with double trailers, operated by FedEx Freight, Inc., collided with a passenger car and then a Setra motorcoach on Interstate 5 in Orland, California, resulting in 10 fatalities and more than three dozen injured.¹ Additional information about this crash and the resulting recommendations may be found at our website, www.nts.gov, under report number NTSB/HAR-15/01.

As a result of this investigation, we issued four new recommendations, including two to the Federal Motor Carrier Safety Administration (FMCSA) and the following two recommendations to the National Highway Traffic Safety Administration (NHTSA):

H-15-12

Revise Federal Motor Vehicle Safety Standard 302 to adopt the more rigorous performance standards for interior flammability and smoke emissions characteristics already in use throughout the US Department of Transportation for commercial aviation and rail passenger transportation.

¹ See *Truck-Tractor Double Trailer Median Crossover Collision With Motorcoach and Postcrash Fire on Interstate 5, Orland, California, April 10, 2014*, Highway Accident Report NTSB/HAR-15/01 (Washington, DC: National Transportation Safety Board, 2015).

H-15-13

Require new motorcoach and bus designs to include a secondary door for use as an additional emergency exit.

The NTSB also reiterated the following seven previously issued recommendations to NHTSA:

H-99-9

Revise the Federal Motor Vehicle Safety Standard 217, “Bus Window Retention and Release,” to require that other than floor-level emergency exits can be easily opened and remain open during an emergency evacuation when a motorcoach is upright or at unusual attitudes.

H-99-54

Develop and implement, in cooperation with other Government agencies and industry, standards for on-board recording of bus crash data that address, at a minimum, parameters to be recorded, data sampling rates, duration of recording, interface configurations, data storage format, incorporation of fleet management tools, fluid immersion survivability, impact shock survivability, crush and penetration survivability, fire survivability, independent power supply, and ability to accommodate future requirements and technological advances.

H-00-1

Revise the Federal Motor Vehicle Safety Standards to require that all motorcoaches be equipped with emergency lighting fixtures that are outfitted with a self-contained independent power source.

H-00-2

Revise the Federal Motor Vehicle Safety Standards to require the use of interior luminescent or exterior retroreflective material or both to mark all emergency exits in all motorcoaches.

H-10-7

Require that all buses above 10,000 pounds gross vehicle weight rating be equipped with on-board recording systems that: (1) record vehicle parameters, including, at minimum, lateral acceleration, longitudinal acceleration, vertical acceleration, heading, vehicle speed, engine speed, driver’s seat belt status, braking input, steering input, gear selection, turn signal status (left/right), brake light status (on/off), head/tail light status (on/off), passenger door status (open/closed), emergency door status (open/closed), hazard light status (on/off), brake system status (normal/warning), and flashing red light status (on/off; school buses only); (2) record status of additional seat belts, airbag deployment criteria,

airbag deployment time, and airbag deployment energy; (3) record data at a sampling rate sufficient to define vehicle dynamics and be capable of preserving data in the event of a vehicle crash or an electrical power loss; and (4) are mounted to the bus body, not the chassis, to ensure recording of the necessary data to define bus body motion.

H-10-14

Develop and implement minimum performance standards for event data recorders for trucks with gross vehicle weight ratings over 10,000 pounds that address, at a minimum, the following elements: data parameters to be recorded; data sampling rates; duration of recorded event; standardized or universal data imaging interface; data storage format; and device and data survivability for crush, impact, fluid exposure and immersion, and thermal exposure. The standards should also require that the event data recorder be capable of capturing and preserving data in the case of a power interruption or loss, and of accommodating future requirements and technological advances, such as flashable and/or reprogrammable operating system software and/or firmware updates.

H-10-15

After establishing performance standards for event data recorders for trucks with gross vehicle weight ratings over 10,000 pounds, require that all such vehicles be equipped with event data recorders meeting the standards.

In addition, the NTSB superseded one previously issued recommendation to the FMCSA.

These safety recommendations are derived from the NTSB's investigation and are consistent with the evidence we found and the analysis we performed. Chairman HART, Vice Chairman DINH-ZARR, and Members SUMWALT and WEENER concurred in these recommendations.

The NTSB is vitally interested in these recommendations because they are designed to prevent accidents and save lives. We would appreciate receiving a response from you within 90 days detailing the actions you have taken or intend to take to implement them. When replying, please refer to the safety recommendations by number. We encourage you to submit your response electronically to correspondence@ntsb.gov.

[Original Signed]

By: Christopher A. Hart,
Chairman