

Log H-569



National Transportation Safety Board

Washington, D. C. 20594

Safety Recommendation

Date: October 28, 1992

In Reply Refer To: H-92-86

Honorable Andrew H. Card, Jr.
Secretary
U.S. Department of Transportation
400 Seventh Street, S.W.
Washington, D.C. 20590

About 9:10 a.m. on December 11, 1990, a tractor-semitrailer in the southbound lanes of I-75 near Calhoun, Tennessee, struck the rear of another tractor-semitrailer that had slowed because of fog. The uninjured truckdrivers exited their vehicles and attempted to check for damage. After the initial collision, an automobile struck the rear of the second truck and was in turn struck in the rear by another tractor-semitrailer. Fire ensued and consumed two trucks and the automobile. Meanwhile, in the northbound lanes of I-75, an automobile struck the rear of another automobile that had slowed because of fog. Then, a pickup truck and two other automobiles became involved in the chain-reaction rear end collision. No fatalities, injuries, or fires occurred. Subsequently, 99 vehicles in the northbound and southbound lanes were involved in multiple-vehicle chain-reaction collisions that killed 12 people and injured 42 others.¹

As a result of the Intermodal Surface Transportation Efficiency Act of 1991, the U.S. Department of Transportation (DOT) has authorized \$660 million over a 6-year period for an Intelligent Vehicle Highway System (IVHS) program to develop technologies for greater safety on the nation's highways. These technologies involve driver, vehicle, and highway interface and lend themselves to addressing limited-visibility and fog-related problems.

The National Transportation Safety Board believes that the IVHS program offers a unique opportunity to develop and implement limited-visibility traffic control countermeasures. Traffic flow detectors, automatic message and vehicle speed control systems, and radar vehicle detection to warn of preceding objects, such as other vehicles, are all appropriate candidates for IVHS projects. The Safety Board believes that the DOT should include limited-visibility countermeasures in demonstration projects funded through the IVHS program.

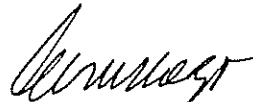
¹For more detailed information, read Highway Accident Report--*Multiple-Vehicle Collisions and Fire during Limited Visibility (Fog) on Interstate 75 near Calhoun, Tennessee, on December 11, 1990* (NTSB/HAR-92/02).

Therefore, the National Transportation Safety Board recommends that the U.S. Department of Transportation:

Incorporate fog and other limited-visibility condition countermeasures in demonstration projects of the Intelligent Vehicle Highway System program. (Class II, Priority Action) (H-92-86)

Also, the Safety Board issued Safety Recommendations H-92-87 and -88 to the Federal Highway Administration; H-92-89 and -90 to the National Highway Traffic Safety Administration; I-92-1 and -2 to the Research and Special Programs Administration; H-92-91 to the Tennessee Department of Transportation; H-92-92 to the Tennessee Highway Patrol; H-92-93 through -95 to the American Association of Motor Vehicle Administrators; I-92-3 to Hercules, Incorporated; I-92-4 to the Charleston Volunteer Fire Department; H-92-96 to the American Automobile Association; and H-92-97 to the American Driver and Traffic Safety Education Association.

VOGT, Chairman, COUGHLIN, Vice Chairman, and LAUBER, HART, and HAMMERSCHMIDT, Members, concurred in this recommendation.



By: Carl W. Vogt
Chairman