

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: September 24, 1976

Forwarded to:

Mr. William A. Bulley
Director
Washington State Highway Commission
Highway Administration Building
Olympia, Washington 98504

SAFETY RECOMMENDATION(S)
H-76-29 and H-76-30

About 1 a.m. on December 4, 1975, a 1975 Peterbilt tank truck and a 1970 Peerless full trailer (tank), owned by Union Oil Company of California, went out of control on the Alaskan Way Viaduct in Seattle, Washington, as the driver attempted to negotiate a curve on the traffic-polished concrete roadway at 52 mph and during a rainstorm. The combination vehicle jackknifed and the trailer struck a viaduct support column. The trailer's tank ruptured and its cargo of gasoline spilled. Fire ensued, spread along the viaduct, and spilled to the ground below, where it ignited 4 railroad freight cars, 30 motor vehicles, and adjacent buildings. The accident caused property damage estimated at \$750,000. Two firemen were injured while fighting the fire.

Results of an American Society of Testing Materials (ASTM) skid test, performed by the Washington State Highway Commission Department of Highways in July 1975, indicated that the skid number on one lane of State Route 99 ranged from 26 to 46 for a test speed of 40 mph. The Federal Highway Administration recommends that road surfaces have a minimum skid number of 37 for a mean traffic speed of 50 mph and a minimum skid number of 31 for a mean traffic speed of 30 mph. The tests performed by the Washington State Highway Commission and the analysis of this accident suggest that further testing and analysis should be performed to determine the safe speed for the roadway and to determine what improvements to the roadway surface are necessary.

Therefore, the National Transportation Safety Board recommends that the Washington State Highway Commission, Department of Highways:

1/For more detailed information on this accident, read "Highway Accident Report -- Union Oil Company of California, Tank Truck and Full Trailer Overturn and Fire, Seattle, Washington, December 4, 1975." NTSB-HAR-76-7.

Conduct skid tests on the viaduct roadway to determine if there is a problem relative to the road surface and, if such is the case, improve the road surface. (H-76-29) (Class II, Priority Followup)

Post warning signs on the viaduct to advise drivers that the viaduct is slippery when wet. (H-76-30) (Class II, Priority Followup)

TODD, Chairman, BAILEY, Vice Chairman, McADAMS, HOGUE, and HALEY, Members, concurred in the above recommendations.

Kay Bailey
for

By: Webster B. Todd, Jr.
Chairman

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WASHINGTON, D.C. 20594

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