

NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

ISSUED: December 27, 1978

Forwarded to:

Ms. Nettie Draughon
City Manager
City of Plant City
P. O. Drawer C
Plant City, Florida 33566

SAFETY RECOMMENDATION(S)

H-78-72 through 75

At 8:25 p.m. on October 2, 1977, westbound Amtrak passenger train No. 57 struck a northbound pickup truck at a railroad/highway grade crossing in Plant City, Florida. The crossing was equipped with red flashing signals, which were operating when the collision occurred. The train was traveling at 70 mph in a 79-mph speed zone; the pickup truck was traveling at 50 mph in a 45-mph speed zone. The 10 occupants of the pickup truck died in the crash. None of the traincrew or its 30 passengers was injured. 1/

On the northbound approach to the Turkey Creek Road grade crossing, the westbound train was not visible to the northbound driver until she passed a stand of trees 400 feet south of the grade crossing. At that point the train was 559 feet from the crossing. There was no way the train could stop. The pickup truck could have stopped short of the crossing after the train became visible, but there was no time for hesitation on the part of the driver.

There were no railroad warning markings on the pavement on Turkey Creek Road, a nonfederal-aid highway, for either approach to the crossing. The advance railroad warning sign for northbound traffic was installed 202 feet south of the crossing, rather than the 250 feet required in an urban environment. In addition, in 1977, a diagnostic team of experts from the Florida DOT, Amtrak, and SCL had recommended that this crossing be given first priority for the installation of gates and cantilever lights.

1/ For more detailed information read: "Railroad/Highway Accident Report: Seaboard Coast Line/Amtrak Passenger Train/Pickup Truck Collision, Plant City, Florida, October 2, 1977" (NTSB-RHR-78-2).

Section 316.1575 of the Florida Uniform Traffic Control Code, "Obedience to Signal Indicating Approach of Train," requires that drivers of vehicles stop on their approach to a railroad grade crossing when there is a clearly visible signal device giving warning of the immediate approach of a railroad train. Vehicles must stop within 50 feet, but not less than 15 feet, from the nearest rail of the railroad tracks and proceed only when safe to do so.

An autopsy of the driver of the pickup truck disclosed a 0.14 percent blood alcohol level. The Florida traffic code states that blood alcohol level of 0.10 percent or more is prima facie evidence of driving while under the influence of alcohol.

According to data routinely supplied by county medical examiners, alcohol was involved in about 50 percent of the traffic fatalities in Florida. About 40 percent of the alcohol-involved drivers in fatal accidents had a blood alcohol level of .20 percent or higher.

During its investigation of this accident, the Safety Board could find no evidence of law enforcement related to violation of grade crossing warning signals. The Florida State Highway Patrol indicated that any such enforcement for the Turkey Creek Road crossing was at the best minimal.

Enforcement is an important and necessary element in all traffic safety programs. It provides a deterrent to that small group of violators and encourages compliance by those who would not do so otherwise. The city of Plant City should review its selective traffic law enforcement program and assure that the proper emphasis is applied to driving while under the influence of alcohol and disregarding a railroad warning signal -- the two major violations that caused this accident.

The flashing light warning signal for the Turkey Creek crossing is activated by approaching trains when they are 2,808 feet from the crossing. The tracks are used by both high-speed passenger trains and slower-moving freight trains. The accident train reached the crossing in 27.4 seconds after the signal was activated. A freight train traveling at 20 mph would require 1.5 minutes to reach the crossing. This traffic mix could have contributed to the accident, since the variance in warning times may have influenced the truckdriver's attitude and judgment, especially in her impaired state.

Both the Association of American Railroads 2/ and the Federal Highway Administration 3/ have guidelines that recommend installation of special devices or circuits to provide reasonably uniform notice in

2/ "Recommended Practices for Railroad-Highway Grade Crossing Warning Systems," Bulletin No. 7, published by the Communication and Signal Section, Association of American Railroads, 1974.

3/ FHWA Manual on Uniform Traffic Control Devices, Part VIII 8C-5, dated April 1, 1978.

advance of all train movements over a crossing. The Florida DOT should cooperate with Plant City and the SCL Railroad Company to insure that the improvement plans for upgrading the Turkey Creek crossing provide for the installation of the necessary devices or circuitry so that uniform warnings are given regardless of train speeds.

Therefore, the National Transportation Safety Board recommends that the city of Plant City, Florida:

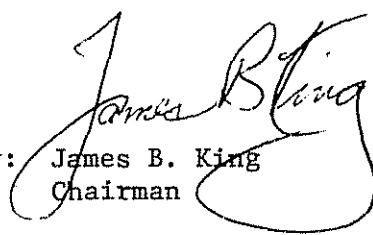
Cooperate with the Florida DOT and the Seaboard Coast Line Railroad Company to bring about the installation of the recommended reflectorized, lighted, automatic gates and cantilever flashing light signals and uniform warning signal timing devices, at the Turkey Creek crossing in Plant City. (Class II, Priority Action) (H-78-72)

Install the required advance pavement markings on Turkey Creek Road on both approaches to the railroad/highway grade crossing. (Class II, Priority Action) (H-78-73)

Relocate the advance railroad/highway grade crossing warning signs on Turkey Creek Road 250 feet before both approaches to the grade crossing, as required by the Manual on Uniform Traffic Control Devices. (Class II, Priority Action) (H-78-74)

As part of its Operation Lifesaver program, emphasize in its selective traffic law enforcement program grade crossing warning signal violators and those who drive while under the influence of alcohol or drugs. (Class I, Urgent Action) (H-78-75)

KING, Chairman, DRIVER, Vice Chairman, McADAMS and HOGUE, Members concurred in the above recommendations.

By:  James B. King
Chairman

