

NATIONAL TRANSPORTATION SAFETY BOARD  
WASHINGTON, D.C.

SP-20  
Log H-444 B

ISSUED: AUG 27 1985

Forwarded to:

To the States of Alabama, Alaska,  
Arizona, California, Florida, Georgia,  
Mississippi, Nebraska, South Dakota,  
West Virginia, and Wyoming

SAFETY RECOMMENDATION(S)

H-85-18

About 6:55 a.m., on September 27, 1984, a northbound Florida East Coast Railway Company freight train struck a westbound Indian River Academy schoolbus stalled at a grade crossing on Walton Road in Port St. Lucie, Florida. The grade crossing was a two-lane, asphalt-paved, county road intersecting a single railroad track with automatic flashing signals and gates. The 1968 Bluebird/Chevrolet 66-passenger schoolbus was occupied by the driver and four students. Two of the students fled the stopped bus before impact and were not injured. In the collision, the bus body separated from the chassis, and the three remaining occupants were ejected. The two students were killed, and the busdriver was injured seriously. <sup>1/</sup>

After unsuccessful efforts to restart the engine just before the accident, while the bus was astride the track, the busdriver stood up and ordered the passengers off the schoolbus. Two passengers, a 13-year-old boy and a 15-year-old girl seated in the two front seats, were "pushed" by the busdriver out of the front door. The two fleeing passengers ran to the northeast and away from the schoolbus. A third passenger, a 12-year-old girl seated in the second seat behind the busdriver, ran to the rear of the schoolbus to awaken the busdriver's 10-year-old son who was asleep on a rear seat. From behind the schoolbus, a pickup driver saw the two children at the rear emergency door for an estimated 10 to 15 seconds, while they appeared to be attempting to open it. The busdriver still was on the schoolbus calling to the two children to get off, and one of them had turned and was running toward the front of the bus when the train struck the schoolbus.

<sup>1/</sup> For more detailed information, read Railroad/Highway Accident Report—"Grade Crossing Collision of Florida East Coast Railway Company Freight Train and Indian River Academy Schoolbus, Port St. Lucie, Florida, September 27, 1984" (NTSB/RHR-85/01).

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A deadbolt lock had been installed on the emergency door of the schoolbus operable by a key outside and a handle inside. Postcrash examination revealed that it was locked at the time of the collision. From inside the bus, the lock handle could be reached only by a person in a seated or crouched position near the rear door. The lock handle could be seen only when sitting in the right-rear seat or when standing facing the rear door and looking directly down at the lock handle. There was no placard describing the location or operation of the lock. Three other schoolbuses owned by the school had deadbolt locks installed on their rear emergency doors in a similar manner. School officials stated that the locks were placed on the doors to prevent theft and vandalism.

A specific prohibition on deadbolt or similar locks on rear emergency doors of schoolbuses could not be documented in either Florida law or Federal standards. There is no evidence to indicate that the stated intent of the Office of Student Transportation (OST) of the Florida Highway Patrol (FHP) to prohibit such locks, or to regulate their use, was communicated to the FHP troopers responsible for the inspection of schoolbuses. Specifically, the trooper who last inspected the accident bus in October 1983 stated that he did not observe a deadbolt lock on the rear emergency door, and that if he had he would not have considered the lock as a rejection item on inspection. Neither the Florida Schoolbus Inspection Manual nor the accompanying inspection form mentioned such locks as an item for inspection.

The Safety Board surveyed directors of pupil transportation in all States and the District of Columbia regarding their policies on the installation of supplemental locks on schoolbus emergency exits. The survey found that 11 States have no regulation on supplemental emergency exit door locks, that 11 States plus the District of Columbia prohibit any such installation, and that the other 28 States allow the installation of these supplemental locks, but impose restrictions on their installation or use. Fifteen of these 28 States require a mechanical device, such as an ignition interlock or audiovisual alarm to minimize the possibility that the schoolbus will be operated with the emergency exits locked. Thirteen of the 28 States do not have restrictions on the type of supplemental lock or latch or on its installation, but do require the device to be in the open or unlocked position whenever the bus is in operation.

The survey also revealed that of the 39 States plus the District of Columbia that prohibit installation of such locks or place limitations on their installation or use, only 23 States apply these regulations to schoolbuses operated by private schools. Thus, in 16 States plus the District of Columbia, students riding in nonpublic schoolbuses are not provided the protection against emergency exit doors being locked that is provided to students riding in public schoolbuses.

The installation or use of supplemental locks on emergency exits of schoolbuses, as the accident at Port St. Lucie demonstrated, can result in tragic consequences. The best measure for preventing a repeat of the Port St. Lucie tragedy would be to prohibit the installation of supplemental locks on emergency exits. However, the Board recognizes that many schools and school districts are confronted with problems such as vandalism and theft which might necessitate the use of a security lock. The use of these locks can be made considerably safer by requiring that all supplemental security locks installed on schoolbus exits be equipped with an ignition interlock system or an audiovisual alarm located in the driver's compartment. At an absolute minimum, States should require that any security lock system be kept open whenever a schoolbus is in operation.

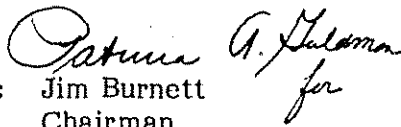
A successful and concomitantly a safe pupil transportation system is dependent upon a comprehensive program to assure a high standard of performance by persons within the system--the government agencies, administrators, safety professionals, vehicle maintenance and service personnel, teachers, passengers, parents, the public, and ultimately the schoolbus drivers. Traditionally, States have accepted responsibility for such programs in public schools and have taken the lead in their development and continuity. Similar responsibility and leadership, however, have not been exercised uniformly in the transportation of pupils by nonpublic schools. In addressing the issue, a 1982 National Highway Traffic Safety Administration technical report stated, "... in a number of States, private and parochial schoolbuses are operated under regulations emanating from several State agencies. Problem identification and countermeasure application are compartmentalized and invariably programs are not rigorously evaluated." 2/

The Safety Board believes that your State should place restrictions on deadbolts or similar supplemental locks on schoolbuses used to transport pupils to and from both public and nonpublic schools. Therefore, the National Transportation Safety Board recommends that the States of Alabama, Alaska, Arizona, California, Florida, Georgia, Mississippi, Nebraska, South Dakota, West Virginia, and Wyoming:

Prohibit the operation of public and nonpublic schoolbuses while deadbolt or similar supplemental locks on emergency doors are engaged. (Class II, Priority Action) (H-85-18)

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 discussed in this letter.

BURNETT, Chairman, GOLDMAN, Vice Chairman, and BURSLEY, Member, concurred in this recommendation.

By:  Patricia A. Goldman  
for  
Jim Burnett  
Chairman

2/ "Effectiveness and Efficiencies in Pupil Transportation Safety," National Highway Traffic Safety Administration, DOT HS-806-134, March 1982.

INTERLOCK OR  
AUDIOVISUAL

Colorado\*  
Connecticut  
Idaho\*  
Illinois  
Indiana  
Louisiana\*  
Massachusetts  
Minnesota  
Missouri  
New Jersey  
New York  
North Dakota  
Ohio  
Virginia\*  
Wisconsin\*

15 total  
10 private

NO RESTRICTIONS

Alabama  
Alaska  
Arizona  
California  
Florida  
Georgia  
Mississippi  
Nebraska  
South Dakota  
West Virginia  
Wyoming

---

11 total

PROHIBITED

Delaware  
District of Columbia\*  
Iowa  
Kentucky\*  
Maryland  
Michigan  
Montana  
Nevada  
North Carolina\*  
Rhode Island  
South Carolina\*  
Tennessee\*

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12 total  
7 private

ALLOWED BUT MUST  
BE KEPT OPEN

Arkansas\*  
Hawaii  
Kansas  
Maine  
New Hampshire\*  
New Mexico\*  
Oklahoma\*  
Oregon  
Pennsylvania\*  
Texas\*  
Utah  
Vermont  
Washington\*

13 total  
6 private

\* Private schools not covered by state requirements (17 total)