

§ 179.102-12 (a) (2) and (a) (7) after January 31, 1975, except that tank cars which are not in compliance and were built before January 31, 1975, must be in compliance with those requirements by January 31, 1976.

Two petitioners have requested the Materials Transportation Bureau to extend the January 31, 1976 compliance date due to unforeseen delays caused for example by unavailability of materials, that have prevented the modifications required by § 179.102-12 (a) (2) and (a) (7) to all specification 105A100W tank cars currently in ethylene oxide service.

One petitioner pointed out that unlike the January 31, 1976 compliance date for specification 105A100W tank cars, the compliance date specified for 111A100W4 tank cars is July 31, 1976 (see § 179.202-18(a) (2) and (a) (7)), 39 FR 24909, July 8, 1974). In light of that difference and because the Bureau believes that the delays in meeting the January 31, 1976 compliance date were unavoidable, compliance with the provisions of § 179.102-12(a) (2) and (a) (7) for specification 105A100W tank cars built before January 31, 1975 will be extended.

Since this amendment provides the immediate relief necessary to avoid non-compliance with a not yet effective regulation, notice and public procedure thereon is impracticable and because this amendment imposes no additional

burden on the persons affected, it may be made effective in less than 30 days after publication in the FEDERAL REGISTER.

In consideration of the foregoing, paragraphs (a) (2) and (a) (7) of § 179.102-12 of Title 49, Code of Federal Regulations, are amended by changing the date "January 31, 1976" therein to read "July 31, 1976".

(18 U.S.C. 831-835; 49 CFR 1.53(g))

Effective date. This amendment is effective on January 27, 1976.

Issued in Washington, D.C., on January 22, 1976.

JAMES T. CURTIS, Jr.,
Director,

Materials Transportation Bureau.

[FR Doc. 76-2363 Filed 1-26-76; 8:45 am]

CHAPTER V—NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION, DEPARTMENT OF TRANSPORTATION

[Docket No. 76-3; Notice 1]

PART 571—FEDERAL MOTOR VEHICLE SAFETY STANDARDS

New Pneumatic Tires for Passenger Cars

This amendment adds certain tire size designations to 49 CFR 571.109 (Federal Motor Vehicle Safety Standard No. 109).

Guidelines were published in the FEDERAL REGISTER on October 5, 1968 (33 FR 14964), and amended August 31, 1974 (39 FR 28980), specifying procedures by which routine additions could be made to Appendix A, § 571.109. Under these guidelines the additions become effective 30 days from publication in the FEDERAL REGISTER, if no objections are received. If objections are received, rulemaking procedures for the issuance of motor vehicle safety standards (49 CFR Part 553) are followed.

Accordingly, Appendix A of 49 CFR § 571.109 is amended, subject to the 30-day provision indicated above, as specified below.

Effective date: February 23, 1976, if objections are not received.

The following changes are made to Appendix A of § 571.109, Standard No. 109; *New Pneumatic Tires:*

Amendments requested by the European Tyre and Rim Technical Organization:

§ 571.109 [Appendix amended]

A. In Table I-N, the following new tire size designation and corresponding values are added.

TABLE I-N.—Tire load ratings, test rims, minimum size factors, and section widths for "70 Series" radial ply tires

Tire size designation ¹	Maximum tire loads, (pounds) at various cold inflation pressures (pounds per square inch)												Test rim width (Inches)	Minimum size factor (Inches)	Section width ² (Inches)	
	16	18	20	22	24	26	28	30	32	34	36	38				40
155/70R13.....	630	650	665	685	705	725	740	760	780	800	820	835	855	4	27.17	5.93

¹ The letters "H," "S" or "V" may be included in any tire size designation adjacent to the "R."

² Actual section width and overall width shall not exceed the specified section width by more than 7 percent.

B. In Table I-S, the following new tire size designation and corresponding values are added.

TABLE I-S.—Tire load ratings, test rims, minimum size factors, and section widths for "60 Series" radial ply tires

Tire size designation ¹	Maximum tire loads, (pounds) at various cold inflation pressures (pounds per square inch)												Test rim width (Inches)	Minimum size factor (Inches)	Section width ² (Inches)	
	16	18	20	22	24	26	28	30	32	34	36	38				40
235/60R13.....	950	1,010	1,070	1,130	1,190	1,240	1,300	1,350	1,400	1,440	1,490	1,540	1,580	6	32.81	9.05

¹ The letters "H," "S" or "V" may be included in any tire size designation adjacent to the "R."

² Actual section width and overall width shall not exceed the specified section width by more than 7 percent.

C. In Table I-X, the following new tire size designations and corresponding values are added.

TABLE I-X.—Tire load ratings, test rims, minimum size factors, and section widths for "50 Series" radial ply tires

Tire size designation ¹	Maximum tire loads, (pounds) at various cold inflation pressures (pounds per square inch)												Test rim width (Inches)	Minimum size factor (Inches)	Section width ² (Inches)	
	16	18	20	22	24	26	28	30	32	34	36	38				40
195/50R15.....	650	690	730	770	810	850	890	920	955	990	1,020	1,050	1,080	6	30.16	7.91
225/50R16.....	880	940	1,000	1,060	1,110	1,160	1,210	1,255	1,300	1,345	1,390	1,435	1,475	6½	33.34	8.98

¹ The letters "H," "S" or "V" may be included in any tire size designation adjacent to the "R."

² Actual section width and overall width shall not exceed the specified section width by more than 7 percent.

D. A new Table I-DD, "55 Series" Radial Ply Tires, incorporating the following new tire size designation and corresponding values, is added.

TABLE I-DD.—Tire load ratings, test rims, minimum size factors, and section widths for "55 Series" radial ply tires

Tire size designation ¹	Maximum tire loads (pounds), at various cold inflation pressures (pounds per square inch)												Test rim width (inches)	Minimum size factor (inches)	Section width ² (inches)	
	16	18	20	22	24	26	28	30	32	34	36	38				40
205/55R16.....	780	840	890	930	980	1,030	1,070	1,110	1,150	1,190	1,230	1,270	1,300	6	32.57	8.10

¹ The letters "H," "S" or "V" may be included in any tire size designation adjacent to the "R".
² Actual section width and overall width shall not exceed the specified section width by more than 7 percent.

E. A new Table I-EE, "45 Series" Radial Ply Tires, incorporating the following new tire size designation and corresponding values, is added.

TABLE I-EE.—Tire load ratings, test rims, minimum size factors, and section widths for "45 Series" radial ply tires

Tire size designation ¹	Maximum tire loads, (pounds) at various cold inflation pressures (pounds per square inch)												Test rim width (inches)	Minimum size factor (inches)	Section width ² (inches)	
	16	18	20	22	24	26	28	30	32	34	36	38				40
235/45R15.....	780	840	890	930	980	1,030	1,070	1,110	1,150	1,190	1,230	1,270	1,300	8	33.11	9.20

¹ The letters "H," "S" or "V" may be included in any tire size designation adjacent to the "R".
² Actual section width and overall width shall not exceed the specified section width by more than 7 percent.

(Sec. 103, 119, 201 and 202, Pub. L. 89-563, 80 Stat. 718 (15 U.S.C. 1392, 1407, 1421 and 1422); delegations of authority at 49 CFR 1.50 and 49 CFR 501.8)

Issued on January 20, 1976.

ROBERT L. CARTER,
 Associate Administrator,
 Motor Vehicle Programs.

[FR Doc.76-2086 Filed 1-26-76; 8:45 am]

[Docket No. 75-3; Notice 2]

PART 571—FEDERAL MOTOR VEHICLE SAFETY STANDARDS

School Bus Emergency Exit Requirements

This notice amends Federal Motor Vehicle Safety Standard No. 217, *Bus Window Retention and Release*, 49 CFR 571.217, to specify requirements for emergency doors for school buses pursuant to the provisions of section 202 of the Motor Vehicle and Schoolbus Safety Amendments of 1974 (Pub. L. 93-492, 88 Stat. 1484, 15 U.S.C. 1392). It responds to the congressional mandate to establish standards concerning school bus emergency exits (15 U.S.C. 1392(i) (1)(A)(i)).

Section 202 requires that certain school bus safety standards be published within 15 months of the passage of the 1974 amendments on October 27, 1974. In addition, these statutory provisions remove the otherwise discretionary authority of the NHTSA to establish lead times for compliance under the general rule-making provisions of the National Traffic and Motor Vehicle Safety Act by specifying an effective date for the amendment of 9 months from the date of publication of this notice (15 U.S.C. 1392(i) (1)(B)). The proposed amendments upon which this notice is based were published on February 28, 1975 (40 FR 8569).

Many comments were received in response to the proposal to require either one rear emergency door or two side emergency doors in the rear half of the bus passenger compartment. Many objected that the proposal provided for

too few emergency doors, and requested requirements for additional side doors and roof exits. Some commenters suggested that push-out windows and the "California" rear exit be required. The agency does not discourage the inclusion of additional emergency exits in school buses so long as they comply with the requirements applicable to non-school bus emergency exits. The NHTSA believes that "California" rear window emergency exits may be preferable in certain circumstances and proposes in this issue of the FEDERAL REGISTER to amend this rule to permit the use of the "California" rear window along with a side door emergency exit in place of the rear door emergency exit. In the alternative, it is proposed to allow this option only on rear-engine powered school buses. Under either proposal the requirements of the standard would not be met by providing two side door emergency exits. In addition, the subject of roof exits is being considered and could be the subject of future rulemaking. However, roof exit requirements cannot be included in this rulemaking action because of the statutorily imposed deadline on promulgation of these amendments.

A number of comments were received opposing the proposed interlock requirement on the ground that it would prevent restarting the engine after the school bus stalls in a dangerous intersection or a railroad crossing and panicky passengers jam the release mechanism. The intent of this requirement is to prevent the initial starting of the bus engine until the doors have been

unlocked, by a key, combination, or the operation of a remote switch at the beginning of the day. The deletion of the phrase "or otherwise inoperable" excludes inadvertent jamming of the door release mechanism from the requirement. The word "locked" has been defined for this purpose as not releasable at the door except by a key or combination. It would include doors openable by a remote switch.

Six comments supported the proposal to require an audible alarm when the ignition is on and the release mechanism of any emergency door is not closed. Five of these, however, objected that an alarm at each door in addition to one in the driver's compartment would be unnecessary and unduly costly. The NHTSA does not agree. The purpose of audible alarms at each door is to indicate which release mechanism is not closed. This is especially critical while the vehicle is in motion, as it will serve to warn the passengers in the area of the possibility that an emergency door could open. In addition, it will serve as a deterrent to tampering by children with the emergency door release mechanisms. Therefore, the requirement that an audible alarm be positioned at each emergency door and at the driver's position has been retained.

Objections were received to the requirement that the magnitude of force required to activate the emergency door release mechanism be not more than 40 pounds. The NHTSA does not consider that the 40 pound force limit is too high in light of the location and access requirements of this standard. If the maxi-

imum force level were substantially lowered, there would be a significant likelihood that emergency door release mechanisms would be inadvertently activated by a passenger.

In addition, the NHTSA has noted the possibility of ambiguity with respect to the wording of paragraph S5.4 of the old standard and S5.4.2 of the proposal. The intent of these paragraphs is to specify conditions applicable to the opening of the exit after the release mechanism has been activated. Accordingly, the wording of the two paragraphs has been modified to clearly reflect this intent.

Many school districts and manufacturers objected to the parallelepiped clearance requirement for the emergency doors because of the number of seats that would be eliminated and the costs of redesigning van-type school buses to meet the clearance requirements. In addition, many commenters pointed out that the 12-inch aisle in most school buses precludes effective use of a large exit meeting the proposed requirements.

The NHTSA has determined that these arguments have merit. As a result, the proposed parallelepiped requirements have been modified by reducing the height from 48 inches to 45 inches, reducing the depth from 24 to 12 inches for rear exits in buses over 10,000 lbs GVWR, and to 6 inches for rear exits in buses under 10,000 lbs GVWR. For side exits the depth has been eliminated altogether. Additionally, the forward edge of the side door now coincides with a vertical transverse plane tangent to the rearmost point of the adjacent seat, thus permitting simultaneous exiting of two occupants, between the seat backs and over the seat cushion.

In light of the above, 49 CFR 571.217, *Bus Window Retention and Release*, is amended as follows:

1. S5.2 is revised by the addition of the following sentence at the end of the paragraph:

"School buses shall provide openings for emergency exits that conform to S5.2.3."

2. S5.2.3 is revised to read:

S5.2.3 *School buses.*

S5.2.3.1 Each school bus shall provide, at the manufacturer's option, one emergency door on each side in the rear half of the bus passenger compartment, or one rear emergency door. Each door shall open outward. A rear emergency door shall be hinged on the right side. A side emergency door shall be hinged on its forward side. Any emergency exit provided in addition to those required by this paragraph shall meet the requirements specified in paragraphs S5.3 through S5.5.

S5.2.3.2 The engine starting system of a school bus shall not operate if any emergency exit is locked from either inside or outside the bus. For purposes of this requirement, "locked" means that the release mechanism cannot be activated by a person at the door without a special device such as a key or special information such as a combination.

3. S5.3.1 is revised to read:

S5.3.1 Each push-out window or other emergency exit not required by S5.2.3 shall be releasable by operating one or two mechanisms located within the regions specified in Figure 1, Figure 2, or Figure 3. The lower edge of the region in Figure 1, and Region B in Figure 2, shall be located 5 inches above the adjacent seat, or 2 inches above the armrest, if any, whichever is higher.

4. S5.3.2 is revised by amending the first sentence to read:

"When tested under the conditions of S6, both before and after the window retention test required by S5.1, each emergency exit not required by S5.2.3 shall allow manual release of the exit by a single occupant using force applications each of which conforms, at the option of the manufacturer, either to (a) or (b).

5. A new S5.3.3 is added to read:

S5.3.3 When tested under the conditions of S6, both before and after the window retention test required by S5.1, each school bus emergency door shall allow manual release of the door by a single person, from both inside and outside the bus passenger compartment, using a force application that conforms to paragraphs (a) through (c). Each release mechanism shall operate without the use of remote controls or tools, and notwithstanding any failure of the vehicle's power system. When the release mechanism is not in the closed position and the vehicle ignition is in the "on" position, a continuous warning sound shall be audible at the driver's seating position and in the vicinity of the emergency door having the unclosed mechanism.

(a) Location: Within the high force access region shown in Figure 3A for a side emergency door, and in Figure 3D for a rear emergency door.

(b) Type of motion: Upward from inside the bus; at the discretion of the manufacturer from outside the bus.

(c) Magnitude of force: Not more than 40 pounds.

6. The present S5.4 is renumbered S5.4.1, and the phrase "Each push-out window or other emergency exit shall, after the release mechanism has been operated," is replaced by the phrase "After the release mechanism has been operated, each push-out window or other emergency exit not required by S5.2.3," at the beginning of the paragraph.

7. A new S5.4.2 is added to read:

S5.4.2 *School Buses Over 10,000 Pounds GVWR.* (a) After the release mechanism has been operated, each school bus rear emergency door shall, under the conditions of S6, before and after the window retention test required by S5.1, using the force levels specified in S5.3.3, be manually extendable by a single person to a position that permits an opening large enough to permit unobstructed passage of a rectangular parallelepiped 45 inches high, 24 inches wide, and 12 inches deep, keeping the 45 inch dimension vertical, the 24 inch dimension parallel to the opening and

the lower surface in contact with the floor of the bus at all times.

(b) After the release mechanism has been operated, each school bus side emergency door shall, under the conditions of S6, before and after the window retention test required by S5.1, using the force levels specified in S5.3.3, be manually extendable by a single person to a position that permits an opening at least 45 inches high and 24 inches wide. A vertical transverse plane tangent to the rearmost point of a seat back shall pass through the forward edge of a side emergency door.

S5.4.2.1 *School Buses Less Than 10,000 Pounds GVWR.* School buses with a gross vehicle weight rating (GVWR) less than 10,000 pounds shall conform to all the provisions of S5.4.2, except that the parallelepiped dimensions for the opening of the rear door or doors shall be 45 inches high, 24 inches wide, and 6 inches deep.

7. S5.5.1 and S5.5.2 are revised by adding "In buses other than school buses," before the text of both paragraphs, and a new S5.5.3 is added to read:

S5.5.3 *School buses.* Each school bus emergency door shall have the designation "Emergency Door" in letters at least 2 inches high, of a color that contrasts with its background, located at the top of or directly above the emergency door on both the inside and outside surfaces of the bus. An arrow at least 6 inches in length and at least 3/4-inch in width, of a color that contrasts with its background, indicating the direction in which the release mechanism should be operated to open the emergency door, shall be located within 6 inches of the release mechanism on the inside of the door.

Effective date: October 26, 1976.

(Sec. 103, 112, 119, Pub. L. 89-563, 80 Stat. 718; sec. 202, Pub. L. 93-492, 88 Stat. 1484 (15 U.S.C. 1392, 1401, 1407); delegation of authority at 49 CFR 1.50)

Issued on January 22, 1976.

HOWARD J. DUGOFF,
Acting Administrator.

[FR Doc.76-2275 Filed 1-26-76; 8:45 am]

[Docket No. 73-34; Notice 3]

PART 571—FEDERAL MOTOR VEHICLE SAFETY STANDARDS

School Bus Body Joint Strength

This notice establishes a new motor vehicle safety standard, No. 221, *School Bus Body Joint Strength*, 49 CFR 571.221, specifying a minimum performance level for school bus body panel joints.

The Motor Vehicle and Schoolbus Safety Amendments of 1974 (Pub. L. 93-492, 88 Stat. 1470, herein, the Act) require the issuance of minimum requirements for school bus body and frame crashworthiness. This rulemaking is pursuant to authority vested in the Secretary of Transportation by the Act and delegated to the Administrator of the NHTSA, and is preceded by notices of proposed rulemaking issued January 29, 1974 (39 FR 2490) and March 13, 1975 (40 FR 11738).

One of the significant injury-producing characteristics of school bus accidents, exposure to sharp metal edges, occurs when body panels become separated from the structural components to which they have been fastened. In the accident severe lacerations may result if the occupants of the bus are tossed against these edges. Moreover, if panel separation is great the occupant may be ejected from the vehicle, greatly increasing the possibility of serious injury.

This standard is intended to lessen the likelihood of these modes of injury by requiring that body joints on school buses have a tensile strength equal to 60 percent of the tensile strength of the weakest joined body panel, as suggested by the Vehicle Equipment Safety Commission (VESC). The NHTSA has determined that this is an appropriate level of performance for body joints and that its application to school buses is both reasonable and practicable. Furthermore, the NHTSA believes that adoption of this standard will provide an effective and meaningful solution to the body panel problem.

It is anticipated that this rule will burden manufacturers only to the extent of requiring the installation of more rivets than are currently used. The NHTSA has reviewed the economic and environmental impact of this proposal and determined that neither will be significant.

In their response to the two NHTSA proposals on this subject, several of the commenters suggested that the standard could be met by reducing the strength of the panel rather than increasing the strength of the joint, and that a minimum joint strength should be required. For several reasons the NHTSA does not believe that a minimum absolute joint strength is desirable at this time. While this standard will tend to increase the overall strength of buses, it is not designed to set minimum body panel strength requirements. Its purpose is to prevent panels from separating at the joint in the event of an accident. In order to deal with the problem of laceration, this regulation must be applicable to both exterior and interior joints. An absolute minimum joint strength requirement would be constrained by the level of performance appropriate for the relatively thin interior panels. Thus, the overall level of performance could not be defined in a meaningful fashion without severely and unnecessarily limiting the manufacturer's flexibility in designing his product. The NHTSA School Bus Rollover Protection Standard (49 CFR 571.220), which specifies requirements for the structural integrity of school bus bodies, should result in a practical lower limit on panel strength and thereby set a practical absolute minimum joint strength.

The NHTSA has no evidence that the mode of failure found in the larger traditional school buses also occurs in smaller, van-type school buses currently manufactured by automobile manufacturers for use as 11- to 17-passenger school

buses. Ford Motor Company commented that the mode of injury sought to be prevented by this standard does not occur in accidents involving school buses converted from multipurpose passenger vehicles (vans). Chrysler Corporation suggested that the proposed requirement is inappropriate when applied to vans with "coach" joint construction. Based on these comments, the NHTSA has determined that until information to the contrary appears or is developed these vehicles should not be covered by the requirement. Accordingly, the application of the standard has been limited to school buses with a gross vehicle weight rating over 10,000 pounds.

Several commenters suggested that certain types of joints might not be susceptible of testing in the manner specified in this regulation. Up to this time the NHTSA has not found sufficient evidence in support of that position to justify amending the standard. If information is received indicating that different test methods are required for certain applications, appropriate action will be initiated.

In consideration of the foregoing, a new motor vehicle safety standard, No. 221, *School Bus Body Joint Strength*, is added as § 571.221 of Part 571 of Title 49, Code of Federal Regulations, as set forth below.

Effective date: October 26, 1976.

The effective date of this standard is 9 months after the date of issuance, as required by the Motor Vehicle and Schoolbus Safety Amendments of 1974, Pub. L. 93-492, section 202 (15 U.S.C. 1397(i)(1)(A)).

(Sec. 103, 119, Pub. L. 89-563, 80 Stat. 718 (15 U.S.C. 1392, 1407); section 202, Pub. L. 93-492, 88 Stat. 1470 (15 U.S.C. 1392); delegation of authority at 49 CFR 1.50)

Issued on January 22, 1976.

HOWARD J. DUGOFF,
Acting Administrator.

§ 571.221 Standard No. 221, school bus body joint strength.

S1. Scope. This standard establishes requirements for the strength of the body panel joints in school bus bodies.

S2. Purpose. The purpose of this standard is to reduce deaths and injuries resulting from the structural collapse of school bus bodies during crashes.

S3. Application. This standard applies to school buses with gross vehicle weight ratings of more than 10,000 pounds.

S4. Definitions. "Body component" means a part of a bus body made from a single piece of homogeneous material or from a single piece of composite material such as plywood.

"Body panel" means a body component used on the exterior or interior surface to enclose the bus' occupant space.

"Body panel joint" means the area of contact or close proximity between the edges of a body panel and another body component, excluding spaces designed for ventilation or another functional purpose, and excluding doors, windows, and maintenance access panels.

"Bus body" means the portion of a bus that encloses the bus's occupant space, exclusive of the bumpers, the chassis frame, and any structure forward of the forwardmost point of the windshield mounting.

S5. Requirement. When tested in accordance with the procedure of S6, each body panel joint shall be capable of holding the body panel to the member to which it is joined when subjected to a force of 60% of the tensile strength of the weakest joined body panel determined pursuant to S6.2.

S6. Procedure.

S6.1 Preparation of the test specimen.

S6.1.1 If a body panel joint is 8 inches long or longer, cut a test specimen that consists of any randomly selected 8-inch segment of the joint, together with a portion of the bus body whose dimensions, to the extent permitted by the size of the joined parts, are those specified in Figure 1, so that the specimen's centerline is perpendicular to the joint at the midpoint of the joint segment. Where the body panel joint is not fastened continuously, select the segment so that it does not bisect a spot weld or a discrete fastener.

S6.1.2 If a joint is less than 8 inches long, cut a test specimen with enough of the adjacent material to permit it to be held in the tension testing machine specified in S6.3.

S6.1.3 Prepare the test specimen in accordance with the preparation procedures specified in the 1973 edition of the Annual Book of ASTM Standards, published by the American Society for Testing and Materials, 1916 Race Street, Philadelphia, Pennsylvania 19103.

S6.2 Determination of minimum allowable strength. For purposes of determining the minimum allowable joint strength, determine the tensile strengths of the joined body components as follows:

(a) If the mechanical properties of a material are specified by the American Society for Testing and Materials, the relative tensile strength for such a material is the minimum tensile strength specified for that material in the 1973 edition of the Annual Book of ASTM Standards.

(b) If the mechanical properties of a material are not specified by the American Society for Testing and Materials, determine its tensile strength by cutting a specimen from the bus body outside the area of the joint and by testing it in accordance with S6.3.

S6.3 Strength test.

S6.3.1 Grip the joint specimen on opposite sides of the joint in a tension testing machine calibrated in accordance with Method E4, Verification of Testing Machines, of the American Society for Testing and Materials (1973 Annual Book of ASTM Standards).

S6.3.2 Adjust the testing machine grips so that the joint, under load, will be in stress approximately perpendicular to the joint.

S6.3.3 Apply a tensile force to the specimen by separating the heads of the

testing machine at any uniform rate not less than $\frac{1}{8}$ inch and not more than $\frac{3}{8}$ inch per minute until the specimen separates.

[FR Doc. 76-2276 Filed 1-26-76; 8:45 am]

[Docket No. 75-2; Notice 02]

PART 571—FEDERAL MOTOR VEHICLE SAFETY STANDARDS

School Bus Rollover Protection

This notice establishes a new motor vehicle safety Standard No. 220, *School Bus Rollover Protection*, 49 CFR 571.220, specifying performance requirements for the structural integrity of the passenger compartment of school buses when subjected to forces that can be encountered in rollovers.

The Motor Vehicle and Schoolbus Safety Amendments of 1974 (the Act) mandate the issuance of Federal motor vehicle safety standards for several aspects of school bus performance, including crashworthiness of the vehicle body and frame. Pub. L. 93-492, section 202 (15 U.S.C. 1392(i) (1) (A)). Based on this mandate and on bus body crashworthiness research (DOT-HS-046-3-694), the NHTSA proposed rollover protection requirements for school buses (40 FR 8570, February 28, 1975). Citing statistics on the safety record of school bus operation, several manufacturers questioned whether any standard for school bus rollover protection could be justified.

The Act reflects a need, evidenced in correspondence to the NHTSA from the public, to protect the children who ride in school buses. They and their parents have little direct control over the types of vehicles in which they ride to school, and are not in a position to determine the safety of the vehicles. It is for this reason that the school bus standards must be effective and meaningful.

At the same time, the safety history of school buses does not demonstrate that radical modification of school bus structure would substantially decrease occupant death and injury. As noted in the "School Bus Safety Improvement Program" contract conducted by Ultrasystems, Inc. (DOT-HS-046-3-694), for the NHTSA:

School buses are a relatively safe mode of human transportation. School bus accident rates and injury/fatality rates on a per-vehicle, per-vehicle-mile, per-passenger-mile, or per-passenger basis are significantly less than for other passenger vehicles. Accidents to school children while enroute to and from school occur primarily in modes other than as school bus passengers. However, school bus safety can and should be improved.

As a practical matter, the amount of structural modification called for in this standard is also limited as a result of the 9-month lead time available to implement the provisions of each school bus standard after its promulgation. The various new requirements imposed in response to the mandate of the Act will require considerable effort by school bus manufacturers to bring their products into conformity in the 9-month period.

The Physicians for Automotive Safety, The National Transportation Safety Board, the Home Insurance Company and other commenters suggested that the NHTSA had ignored the recommendations of the report submitted by Ultrasystems on school bus improvement. The report concluded that the improved school bus design tested by Ultrasystems could withstand a significantly greater load for the same amount of roof crush than existing school bus designs.

In fact, the NHTSA evaluated the test results and Ultrasystems' recommendations carefully. While the percentage of reduction of roof crush would be substantial as a result of the recommended design change, no relationship of this decrease in deflection to improved safety for occupants was established. Ultrasystems reported that increases of \$500 in cost and 530 pounds were incurred to achieve several improvements, including those of the vertical roof crush test.

The recommendations also implied increased structural rigidity but did not evaluate its effect on the amount of energy absorbed by vehicle occupants in a crash. Also, Ultrasystems did not consider the problems of lead time and retooling costs in making its recommendations. The NHTSA continues to consider that its proposal of $5\frac{1}{2}$ inches of maximum roof crush under a load equal to $1\frac{1}{2}$ times the vehicle's unloaded weight provides a satisfactory level of occupant crash protection. Available data do not support the conclusion that a 2- or 3-inch reduction of this crush would significantly improve the level of passenger safety in school buses. It is the intention of the NHTSA to continually review accident statistics relating to school bus safety. Accordingly, future upgrading of the standard will be considered should such action be warranted based upon availability of appropriate data.

In response to inquiries from the Motor Vehicle Manufacturers Association and General Motors as to the origin of the $5\frac{1}{8}$ -inch requirement, the limit is drawn from the existing School Bus Manufacturers Institute requirement for school bus structural integrity (Static Load Test Code for School Bus Body Structure, issued by the School Bus Manufacturers Institute).

In adopting the $5\frac{1}{8}$ -inch limit found in the present industry standard, the NHTSA is not merely preserving the status quo. While a manufacturer may have designed its products to meet the industry standard in the past, certain of its products presumably performed either better or worse than the nominal design. Conformity to NHTSA standards, in contrast, requires that every vehicle be capable of meeting the $5\frac{1}{8}$ -inch limit. This means that the manufacturer must design its vehicles to meet a higher level of performance, to provide a compliance margin for those of its products which fall below the nominal design level. Of course, the manufacturer can reduce the compliance-margin problem without redesign by improving the consistency of its manufacturing processes.

The standard requires that, upon the application of vertical downward force to the bus roof equal to $1\frac{1}{2}$ times the vehicle's unloaded weight, the vehicle roof shall not crush more than $5\frac{1}{8}$ inches, and the emergency exits shall be capable of being opened, with the weight applied, and after its release. The National Transportation Safety Board, the Vehicle Equipment Safety Commission (VESC), Mercedes-Benz, and the Action for Child Transportation Safety organization suggested other methods for evaluation of crashworthiness. The NHTSA has considered these, but concludes that the static test specified in this standard provides a reasonable means to determine crashworthiness without unnecessary testing expense.

Based on submitted comments, the standard varies in some respects from the proposal. The sizes of the force application plates used to apply force and the method of application have been revised to simplify the test procedures and equipment, and to spread the force over larger areas of the vehicle roofs of large and small vehicles. The proposal specified a rigid, rectangular force application plate 36 inches wide and 20 inches shorter than the vehicle roof, preventing reliance on the roof end structures for rollover protection in typical body-on-chassis construction. Commenters pointed out that the end structures of the roof are almost certain to bear the weight of a rollover and should be included in a test of a vehicle's crashworthiness. Several manufacturers and other commenters recommended an increase in the size of the force application plate, in order to permit the foremost and rearmost roof "bows" of their buses to absorb a portion of the test load. Ford Motor Company stated it had performed the test as proposed and asserted that the roof of its van-type vehicle as presently designed could not meet the requirement without an increase in the size of the force application plate to distribute the load over the entire vehicle roof. Chrysler Corporation stated it would find it necessary to discontinue production of small school buses because of redesign costs if the requirements were adopted as proposed.

With a view to the safety record of school buses and the 9-month lead time, the NHTSA concludes that the force application plate can be modified so that an additional "bow" or "bows" bear part of the applied force. It is the NHTSA's view that a change to permit both roof end structures to fully contribute to support of the applied force in the case of buses of more than 10,000 pounds would be a relaxation of current industry practices. Accordingly, the extent of change recommended by the industry is not adopted. The NHTSA concludes that an 8-inch increase in the length of the force application plate is sufficient to allow some portion of the applied force to be absorbed by the end bows of the roof while maintaining adequate crash protection. Therefore, for these buses the width of the plate remains as proposed

while the length of the plate is increased 8 inches.

In the case of lighter buses, which are generally of the van type, the NHTSA has increased both the width and length of the plate to encompass the entire roof.

The procedure for applying force through the plate has also been modified in some respects. Many comments objected that the procedure required an expensive, complex hydraulic mechanism that would increase the costs of compliance without justification. The proposal specified an "evenly-distributed vertical force in a downward direction through the force application plate", starting with the plate horizontal. Commenters interpreted these specifications to mean that the vehicle would be required to absorb the energy in evenly-distributed fashion and that the horizontal attitude of the plate must be maintained.

Actually these specifications were included in the proposed method to advise manufacturers of the precise procedures to be employed in compliance testing of their products. Understanding that some manufacturers may choose to achieve the required force application by applying weights evenly over the surface of the plate, the standard specified an "evenly-distributed force" to eliminate other methods (such as a concentrated force at one end of the plate) that could unfairly test the vehicle structure. The horizontal attitude of the plate was also intended to establish a beginning point for testing on which a manufacturer can rely. While these specifications establish the exact circumstances under which vehicles can be tested, a manufacturer can depart from them as long as it can be shown that the vehicle would comply if tested exactly as specified. In place of the perfectly rigid plate called for in the standard, for example, a manufacturer could employ a plate of sufficient stiffness to ensure that the test results are not affected by the lack of rigidity.

Some modification of the test procedures has been made for simplification and clarity. To permit placement of the plate on the roof to begin testing without a suspension mechanism, the specification for horizontal attitude is modified to permit the plate to depart from the horizontal in the fore and aft direction only. Some manufacturers considered the initial application of force as an unnecessary complication. However, the initial force application of 500 pounds has been retained in order to permit elimination of inconsequential deformation of the roof structure prior to measurement of the permissible 5½ inches of deflection. In instances where the force application plate weighs more than 500 pounds, some type of suspension mechanism could be used temporarily to constrain the load level to the initial value, if the manufacturer decides to conduct his testing exactly as specified in the standard's procedures.

The requirement that force be applied "through the plate" has been changed to "to the plate" in order to avoid a misunderstanding that the vehicle must

absorb energy evenly over the surface of its roof.

As proposed by several commenters, the rate of application in pounds per minute has been changed to inches per second, specifically "at any rate not more than ½ inch per second." Manufacturers should understand that "any" in this context is defined by the NHTSA (49 CFR 571.4) to mean that the vehicle roof must satisfy the requirement at every rate of application within the stated range. General Motors reports that as a practical matter, the effect of speed in rate of application for tests of this nature is not significant in the range of 0.12 inches per second to 1 inch per second.

The requirement that movement "at any point" on the plate not exceed 5½ inches has not been modified despite some objections. The NHTSA considers it reasonable that excessive crush not be permitted at the extremities of the plate. Measurement of movement only at the center of the plate, for example, would permit total collapse of the structure in any direction as long as one point on the bus maintained its integrity.

The preparation of the vehicle for the application of force has been modified to specify replacement of non-rigid body mounts with equivalent rigid mounts. The compression of deformable body mounts is unrelated to crashworthiness of the structure and can therefore be eliminated to permit testing of the structure itself.

Accessories or components which extend upward from the vehicle's roof (such as school bus lights) are removed for test purposes. It is also noted that the vehicle's transverse frame members or body sills are supported for test purposes. In response to a question from Blue Bird Body Company, a frame simulator may be used along with any other variations as long as the manufacturer assures himself that the vehicle would conform if tested precisely as specified in the standard.

The vehicle's emergency exits must also be capable of opening when the required force is applied, and following release of the force. As noted in comments, this requirement simulates the use of the exits after a rollover, whether or not the vehicle comes to rest on its roof. The proposed requirement of ability to close these exits is eliminated because such a capability is unnecessary in an emergency evacuation of the bus. For this reason, the requirement has been modified so that a particular test specimen (i.e., a particular bus) will not be required to meet requirements for emergency exits which open following release of force, if the exits have already been tested while the application force is maintained.

With regard to the requirements as a whole, Crown Coach and other manufacturers argued that the application of 1½ times the vehicle's unloaded weight unfairly discriminates against buses with a higher vehicle weight-to-passenger ratio. The NHTSA disagrees, and notes that the relevant consideration in

rollover is the weight of the vehicle itself in determining the energy to be absorbed by the structure. In a related area, one manufacturer suggested that the increased weight of the NHTSA's contemplated new standards for school buses would increase unloaded vehicle weight to the point where redesign would be required to meet the rollover standard. The NHTSA has considered this issue and estimates that the only significant new weight would be for improved seating. This weight increase would not substantially increase the severity of the rollover standard.

The State of California suggested consolidation of the rollover standard with the joint strength standard. While such a consolidation would appear logical for school buses alone, the NHTSA prefers the flexibility of separate standards with a view to their use independently in the future for other vehicle types. For example, the application of vertical force to the vehicle structure may be appropriate in a vehicle for which the joint strength requirement would not be appropriate.

The State of Georgia requested that transit systems transporting school children be exempted from Standard No. 220. This commenter apparently misunderstood the applicability of the standard. It only applies to newly-manufactured vehicles and does not require modification of existing fleets, whether or not operated by a transit authority.

Interested persons should note that the NHTSA has issued a proposal to modify the definition of "school bus" (40 FR 40854, September 1, 1975) and that if that definition is adopted the requirements of this standard will apply to all vehicles that fall within the definition, whether or not they fall within the present definition.

In consideration of the foregoing, a new motor vehicle safety standard No. 220, *School Bus Rollover Protection*, is added as § 571.220 of Part 571 of Title 49, Code of Federal Regulations, as set forth below.

Effective date: October 26, 1976.

The effective date of this standard is established as 9 months after the date of its issuance, as required by the Motor Vehicle and Schoolbus Safety Amendments of 1974, Pub. L. 93-492, section 202 (15 U.S.C. 1397(i)(1)(A)).

(Sec. 103, 119, Pub. L. 89-563, 80 Stat. 718 (15 U.S.C. 1392, 1407); section 202, Pub. L. 93-492, 88 Stat. 1470 (15 U.S.C. 1392); delegation of authority at 49 CFR 1.51)

Issued on January 22, 1976.

HOWARD J. DUGOFF,
Acting Administrator.

§ 571.220 Standard No. 220; school bus rollover protection.

S1. *Scope.* This standard establishes performance requirements for school bus rollover protection.

S2. *Purpose.* The purpose of this standard is to reduce the number of deaths and the severity of injuries that result from failure of the school bus body structure to withstand forces encountered in rollover crashes.

S3. *Applicability.* This standard applies to school buses.

S4. *Requirements.* When a force equal to 1½ times the unloaded vehicle weight is applied to the roof of the vehicle's body structure through a force application plate as specified in S5., Test procedures—

(a) The downward vertical movement at any point on the application plate shall not exceed 5/8 inches; and

(b) Each emergency exit of the vehicle provided in accordance with Standard No. 217 (§ 571.217) shall be capable of opening as specified in that standard during the full application of the force, and after release of the force. A particular vehicle (i.e., test specimen) need not meet the emergency exit opening requirement after release of force if it is subjected to the emergency exit opening requirements during the full application of the force.

S5. *Test procedures.* Each vehicle shall be capable of meeting the requirements of S4. when tested in accordance with the procedures set forth below.

S5.1 With any non-rigid chassis-to-body mounts replaced with equivalent rigid mounts, place the vehicle on a rigid horizontal surface so that the vehicle is entirely supported by means of the vehicle frame. If the vehicle is constructed without a frame, place the ve-

hicle on its body sills. Remove any components which extend upward from the vehicle roof.

S5.2 Use a flat, rigid, rectangular force application plate that is measured with respect to the vehicle roof longitudinal and lateral centerlines,

(a) In the case of a vehicle with a GVWR of more than 10,000 pounds, 12 inches shorter than the vehicle roof and 36 inches wide; and

(b) In the case of a vehicle with a GVWR of 10,000 pounds or less, 5 inches longer and 5 inches wider than the vehicle roof. For purposes of these measurements, the vehicle roof is that structure, seen in the top projected view, that coincides with the passenger and driver compartment of the vehicle.

S5.3 Position the force application plate on the vehicle roof so that its rigid surface is perpendicular to a vertical longitudinal plane and it contacts the roof at not less than two points, and so that, in the top projected view, its longitudinal centerline coincides with the longitudinal centerline of the vehicle, and its front and rear edges are an equal distance inside the front and rear edges of the vehicle roof at the centerline.

S5.4 Apply an evenly-distributed vertical force in the downward direction to the force application plate at any rate not more than 0.5 inch per second, until a force of 500 pounds has been applied.

S5.5 Apply additional vertical force in the downward direction to the force application plate at a rate of not more than 0.5 inch per second until the force specified in S4 has been applied, and maintain this application of force.

S5.6 Measure the downward movement of any point on the force application plate which occurred during the application of force in accordance with S5.5.

S5.7 To test the capability of the vehicle's emergency exits to open in accordance with S4(b)—

(a) In the case of testing under the full application of force, open the emergency exits as specified in S4(b) while maintaining the force applied in accordance with S5.4 and S5.5; and

(b) In the case of testing after the release of all force, release all downward force applied to the force application plate and open the emergency exits as specified in S4(b).

S6. *Test conditions.* The following conditions apply to the requirements specified in S4.

S6.1 *Temperature.* The ambient temperature is any level between 32° F. and 90° F.

S6.2 *Windows and doors.* Vehicle windows, doors, and emergency exits are in the fully-closed position, and latched but not locked.

[FR Doc.76-2274 Filed 1-26-76;8:45 am]

proposed rules

This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

DEPARTMENT OF THE TREASURY

Bureau of Alcohol, Tobacco and Firearms

[27 CFR Parts 178, 181]

[Notice No. 289; Reference No. 287]

BLACK POWDER

Commerce in Firearms and Ammunition; and in Explosives; Extension of Comment Period

This notice extends the period for comments on the amended notice of proposed rulemaking, published December 22, 1975 (40 FR 59207), proposing regulations to implement Pub. L. 93-639, effective January 4, 1975. The legislation removed the exemption in 18 U.S.C. 845 (a) (5) on all black powder in quantities not exceeding five pounds. In lieu of the five pound exemption, the new law permits anyone to purchase and use commercially manufactured black powder in quantities of fifty pounds or less, percussion caps, safety and pyrotechnic fuses, quills, quick and slow matches, and friction primers, solely for sporting, recreational, or cultural purposes in antique firearms or in antique devices.

A 30-day comment period, expiring January 21, 1976 was announced in the amended notice. As a result of Congressional interest in the proposed regulations, we are hereby extending the period for comments an additional 45 days to March 8, 1976. Interested persons felt that the 30-day period previously allowed was inadequate to permit many individuals, particularly antique firearms enthusiasts and experts in the field, to evaluate and respond to our new proposals. The proposals, unfortunately, were also published during the lengthy holiday season and notification of the amended proposed regulations did not reach many persons until well into the comment period.

The Bureau sincerely wants to consider all relevant data, views, and suggestions from the public before issuing final regulations on black powder. Due to the controversial nature of the proposals, we feel it is appropriate to extend the period for comments; therefore, the comment period is hereby extended to March 8, 1976.

Signed: January 22, 1976.

REX D. DAVIS,
Director.

[FR Doc.76-2421 Filed 1-23-76;12:24 pm]

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[43 CFR Part 5400]

SALES OF FOREST PRODUCTS: GENERAL

Proposed Policy

The purpose of this amendment is to incorporate into the regulations the policy with regard to access to sales of timber limited to bidding by small business concerns as defined by the Small Business Administration in its regulations (13 CFR Part 121) under the authority of Section 15 of the Small Business Act of July 18, 1958 (72 Stat. 384).

The proposed amendment does not by itself change authorities or procedures which have an impact on the environment. It is hereby determined that the publication of this amendment is not a major Federal action significantly affecting the quality of the human environment and that no detailed statement pursuant to section 102(2)(C) of the National Environmental Policy Act of 1969 (42 U.S.C. 4332(2)(C)) is required.

In accordance with the Department's policy on public participation in rulemaking (36 FR 8336) interested parties may submit written comments, suggestions, or objections with respect to the proposed rules to the Director (210), Bureau of Land Management, Washington, D.C. 20240 until February 19, 1976.

Subpart 5401 is hereby amended as follows:

1. Section 5401.0-6(a) is revised and amended by adding paragraph (b).

Subpart 5401—Advertised Sales: General § 5401.0-6 Policy.

(a) All sales other than those specified in § 5402.0-6 shall be made only after inviting competitive bids through publication and posting. Sales shall not be held sooner than one week after the last advertisement.

(b) No competitive sales shall be offered by the Authorized Officer unless there is access to the sale area which is available to anyone who is qualified to bid. Access to a set-aside sale shall be by one or a combination of the following: (1) Public roads; (2) roads owned and controlled by United States; (3) roads owned or controlled by a permittee of the United States subject to a Bureau right-of-way and road use permit or agreement when the permittee qualifies as a small business concern as defined by the Small Business Administration; (4) roads

owned or controlled by a permittee of the United States who does not qualify as a small business concern as defined by the Small Business Administration when such roads are subject to a Bureau right-of-way and road use permit or agreement executed on or after July 18, 1958; (This includes any such permit or agreement executed on or after July 18, 1958, which supersedes a permit or agreement executed before July 18, 1958).

2. Section 5401.0-6(b) is amended by relettering paragraph (b) as paragraph (c).

JACK O. HORTON,
Assistant Secretary of the Interior.

JANUARY 16, 1976.

[FR Doc.76-2424 Filed 1-23-76;12:45 pm]

Fish and Wildlife Service

[50 CFR Part 17]

ENDANGERED AND THREATENED WILDLIFE AND PLANTS

Denial of Request for a Public Hearing

On October 1, 1975, the U.S. Fish and Wildlife Service (hereinafter, the Service) published a proposal (40 FR 45175) to add the Red Hill salamander to the list of endangered or threatened wildlife. In a letter dated November 20, 1975, Mr. William L. Dickinson requested an extension of the period for public comment on that proposal and, pursuant to section 4(f)(2) of the Endangered Species Act of 1973 (87 Stat. 884), requested the holding of public hearings on the proposal. Although the request for a public hearing was made beyond the 45 days specified in that section, the Service feels that the controversial nature of this proposal merits a reply in the FEDERAL REGISTER.

On January 13, 1976 (40 FR 1915) the Service announced the extension of the period for public comment through February 1, 1976. No public hearings are planned at this time. We are presently in contact with several agencies and other individuals to determine how we may best insure the continued survival of this unique animal while having minimal impact on other activities. Since the comment period has been extended until February 1, 1976, and in view of the continuing discussions, we do not feel that a public hearing is necessary at this time. Upon the closing of the extended comment period, if our analysis of the comments received indicates the