

unit. A is entitled under section 216 to a deduction of \$900 in computing his taxable income for 1972. The deduction is computed as follows:

Shares of X Corporation owned by A	100
Shares of X Corporation owned by four other tenant-stockholders	400
Shares of stock of X Corporation deemed owned by governmental unit	500
Total shares of stock of X Corporation outstanding	1,000
A's proportionate share of the stock of X Corporation (100/1,000)	1/10
Expenses incurred by X Corporation:	
Real estate taxes	\$4,000
Interest	5,000
Other	4,800
Total	\$13,800

Amount paid by A	\$1,380
A's proportionate share of real estate taxes and interest based on his stock ownership (1/10 of \$9,000)	\$900
A's proportionate share of total corporate expenses based on his stock ownership (1/10 of \$13,800)	\$1,380
Amount of A's payment representing real estate taxes and interest (900/1,380 of \$1,380)	\$900
A's allowable deduction	\$900

Since the stock which A acquired by gift was fully paid up by his donor in an amount equal to the portion of the fair market value, as of the date of the original issuance of the stock, of the corporation's equity in the land and building which is attributable to apartment No. 1, the requirement of section 216 in this regard is satisfied. The fair market value at the time of the gift of the corporation's equity attributable to the apartment is immaterial.

Example (2). The facts are the same as in example (1) except that the building constructed by the X Corporation contained, in addition to the 15 apartments, business space on the ground floor, which the corporation rented at \$2,400 for the calendar year 1971. The corporation deducted the \$2,400 from its expenses in determining the amount of the expenses to be prorated among its tenant-stockholders. The amount paid by A to the corporation in 1972 is \$1,140 instead of \$1,380. More than 80 percent of the gross income of the corporation for 1971 was derived from tenant-stockholders. A is entitled under section 216 to a deduction of \$743.48 in computing his taxable income for 1972. The deduction is computed as follows:

Expenses incurred by X Corporation	\$13,800.00
Less: Rent from business space	2,400.00
Expenses to be prorated among tenant-stockholders	\$11,400.00

[FR Doc. 71-3341 Filed 3-9-71; 8:49 am]

Title 33—NAVIGATION AND NAVIGABLE WATERS

Chapter II—Corps of Engineers, Department of the Army

PART 207—NAVIGATION REGULATIONS

Banana River, Fla.

Pursuant to the provisions of section 7 of the River and Harbor Act of August 8, 1917 (40 Stat. 266; 33 U.S.C. 1), § 207.171c is hereby revoked, effective upon publication in the FEDERAL REGISTER (3-10-71) since the area is no longer needed, as follows:

§ 207.171c Banana River at Patrick Air Force Base, Fla.; seaplane restricted area. [Revoked]

[Regs., February 18, 1971, 1522-01—Banana River, Fla.—ENGOW-ON] (Sec. 7, 40 Stat. 266; 33 U.S.C. 1)

For the Adjutant General.

R. B. BELNAP,
Special Advisor to TAG.

[FR Doc. 71-3339 Filed 3-9-71; 8:49 am]

Title 38—PENSIONS, BONUSES, AND VETERANS' RELIEF

Chapter I—Veterans Administration

PART 3—ADJUDICATION

Subpart A—Pension, Compensation, and Dependency and Indemnity Compensation

EFFECTIVE DATES

1. In § 3.400, paragraph (o) is amended to read as follows:

§ 3.400 General.

(o) *Increases* (38 U.S.C. 3010(a); §§ 3.109, 3.156, 3.157). Except as provided in § 3.401(b), date of receipt of claim or date entitlement arose, whichever is later. A retroactive increase or additional benefit will not be awarded after basic entitlement has been terminated, such as by severance of service connection.

2. In § 3.401, paragraph (b) is amended to read as follows:

§ 3.401 Veterans.

(b) *Dependent, additional compensation or pension for.* Latest of the following dates:

(1) Date of claim: This term means the following, listed in their order of applicability:

(i) Date of veteran's marriage, or birth of his child, or his adoption of a child, if the evidence of the event is received within 1 year of the event.

(ii) Date notice is received of dependent's existence, if evidence is received within 1 year of the Veterans Administration request.

(2) Date dependency arises.

(3) Date the law permits benefits for dependents generally.

(4) Date of commencement of veteran's award. (38 U.S.C. 3010(f), (n); Public Law 91-584, 84 Stat. 1575) (Other increases, see § 3.400(o). For school attendance see § 3.667.)

3. In § 3.403, paragraph (c) is amended to read as follows:

§ 3.403 Children.

(c) *Posthumous child.* Date of child's birth if proof of birth is received within 1 year of that date, or if notice of the expected or actual birth meeting the requirements of an informal claim, is received within 1 year after the veteran's death; otherwise, date of claim. (38 U.S.C. 3010(n); Public Law 91-584, 84 Stat. 1575)

(72 Stat. 1114; 38 U.S.C. 210)

These VA regulations are effective December 24, 1970.

Approved: March 4, 1971.

By direction of the Administrator.

[SEAL]

FRED B. RHODES,
Deputy Administrator.

[FR Doc. 71-3302 Filed 3-9-71; 8:46 am]

Title 41—PUBLIC CONTRACTS AND PROPERTY MANAGEMENT

Chapter 6—Department of State

[Dept. Reg. 108.632]

PART 6-1—GENERAL

Miscellaneous Amendments

Correction

In F.R. Doc. 71-3021 appearing at page 4377 in the issue of Friday, March 5, 1971, the bracketed material above the part heading should read as set forth above.

Title 47—TELECOMMUNICATION

Chapter I—Federal Communications Commission

[FCC 71-217]

PART 21—DOMESTIC PUBLIC RADIO SERVICES (OTHER THAN MARITIME MOBILE)

Radio Station Applications; Deletion of Special Filing Requirement for Alaska

Memorandum opinion and order. In the matter of amendment of Part 21 of the Commission's rules to delete the special filing requirement for applications involving radio stations in Alaska.

1. Section 21.13(a) of the Commission's rules now requires that every application for a radio station authorization under Part 21, except applications for stations located in Alaska, be submitted to the Commission's office in Washington, D.C. Paragraph (b) states that applications for authorizations under Part 21 for stations in Alaska shall be filed with the Commission's Engineer-in-Charge (EIC) in Seattle, Wash., and that the filing should include one extra copy of all such applications (§ 21.13 (d)). At the time that the foregoing provisions were adopted in 1956 the Alaska Communications System (ACS) was in existence and was operated by the Department of Defense. ACS headquarters was in Seattle, Wash., and the filing of applications with the Commission's Engineer-in-Charge in Seattle enabled ACS headquarters to keep informed in a timely fashion of the filing of such applications.

2. The ACS effectively ceased to exist when its communications assets were transferred from the U.S. Government to RCA Alaska Communications, Inc., on January 10, 1971. Since the Commission's Seattle office performed no substantive function with respect to the applications, but simply acted as a conduit to ACS headquarters, there appears to be no reason why there should be a continued requirement for the filing of Part 21 Alaska applications with the EIC in Seattle.

3. It would therefore appear to be in the public interest to make appropriate changes in § 21.13, paragraph (a), and to delete the present paragraphs (b) and (d).

4. Authority for this amendment is contained in sections 4(i) and 303 of the Communications Act of 1934, as amended. Since the subject amendment is procedural and relieves a restriction, compliance with the public notice and effective date requirements of 5 U.S.C. 553 is unnecessary.

5. Accordingly, it is ordered, That, effective March 17, 1971, Part 21 is amended as set forth below.

¹ The present paragraph (c) will be redesignated as paragraph (b).

(Secs. 4, 303, 48 Stat., as amended, 1066, 1082; 47 U.S.C. 154, 303)

Adopted: March 3, 1971.

Released: March 4, 1971.

FEDERAL COMMUNICATIONS COMMISSION,

[SEAL] BEN F. WAPLE,
Secretary.

Section 21.13 is amended to read as follows:

§ 21.13 Place of filing applications, fees, and number of copies.

(a) Every application for a radio station authorization, and all correspondence relating thereto, shall be submitted to the Commission's office at Washington, D.C. 20554. Each application shall be accompanied by the fee prescribed in Subpart G of Part 1 of this chapter.

(b) Unless otherwise specified in a particular case, or for a particular form, each application, including exhibits and attachments thereto, shall be filed in duplicate.

[FR Doc. 71-3319 Filed 3-9-71; 8:48 am]

Title 49—TRANSPORTATION

Chapter V—National Highway Traffic Safety Administration, Department of Transportation

[Docket No. 69-7; Notice 9]

PART 571—FEDERAL MOTOR VEHICLE SAFETY STANDARDS

Occupant Crash Protection in Passenger Cars, Multipurpose Passenger Vehicles, Trucks, and Buses

The purpose of this amendment to Standard No. 208, 49 CFR 571.21, is to specify occupant crash protection requirements for passenger cars, multipurpose passenger vehicles, trucks, and buses manufactured on or after January 1, 1972, with additional requirements coming into effect for certain of those vehicles on August 15, 1973, August 15, 1975, and August 15, 1977. The requirements effective for the period beginning on January 1, 1972, were the subject of a notice of proposed rulemaking published September 25, 1970 (35 F.R. 14941), and appear today for the first time in the form of a rule. The requirements for subsequent periods were issued in rule form on November 3, 1970 (35 F.R. 16927), and are reissued today in amended form as the result of petitions for reconsideration.

The substantive rulemaking actions that preceded this amendment are as follows:

(a) May 7, 1970 (35 F.R. 7187)—Proposed requirements and a schedule for the adoption of passive restraint systems and interim active systems.

(b) September 25, 1970 (35 F.R. 14941)—Proposal for a modified interim set of requirements effective January 1, 1972.

(c) November 3, 1970 (35 F.R. 16927)—Rule amending Standard No. 208 to specify requirements for passive restraints, effective July 1, 1973.

(d) November 3, 1970 (35 F.R. 16937)—Proposed additional requirements and conditions to be contained in Standard No. 208.

Following issuance of the November 3 amendment, petitions for reconsideration were filed pursuant to § 553.35 of the procedural rules (49 CFR 553.35, 35 F.R. 5119) by Japan Automobile Manufacturers Association, Inc., American Safety Belt Council, Peugeot, Inc., American Motors Corp., Volvo, Inc., Ford Motor Co., Chrysler, Chrysler United Kingdom, Ltd., International Harvester Co., Automobile Manufacturers Association, General Motors Corp., Volkswagen of America, Inc., Takata Kojyo Co., Ltd., Renault, Inc., American Motors (Jeep), Rolls-Royce, Ltd., American Safety Equipment Corp., Hamill Manufacturing Co., Energy Systems Division (Olin), American Association for Automotive Medicine, Checker Motors Corp., Eaton Yale and Towne, Inc., and the American Academy of Pediatrics.

Concurrently with the evaluation of the petitions, the Administration has reviewed the comments received in response to the September 25 and November 3 proposals, and the interim occupant protection requirements are combined herein with the requirements for later periods.

The standard establishes quantitative criteria for occupant injury, as determined by use of anthropomorphic test devices. For the head, the criterion is a severity index of 1,000, calculated according to SAE Information Report J885a; for the upper thorax, it is a deceleration of 60g except for a cumulative period of not more than 3 milliseconds; and for the upper legs it is an axial force of 1,400 pounds. A fourth criterion is that the test devices must be contained by the outer surfaces of the passenger compartment.

For systems that provide complete passive protection there are three vehicle impact modes in which a vehicle is required to meet the injury criteria. In the frontal mode, the vehicle impacts a fixed collision barrier perpendicularly or at any angle up to and including 30° in either direction from the perpendicular while traveling longitudinally forward at any speed up to 30 m.p.h. In the lateral mode, the vehicle is impacted on its side by a barrier moving at 20 m.p.h. In the rollover mode, the vehicle is rolled over from a speed of 30 m.p.h.

On January 1, 1972, a passenger car will be required to provide one of three options for occupant protection: (1) Passive protection system that meets the above injury criteria in all impact modes at all seating positions; (2) lap belts at all positions, with a requirement that the front outboard positions meet the injury criteria with lap-belted dummies in a 30-m.p.h. perpendicular barrier crash; or (3) lap-and-shoulder-belt systems at the

front outboard positions that restrain test dummies in a 30-m.p.h. barrier crash without belt or anchorage failure, and lap belts in other positions.

Both the second and third options require warning systems that activate a visible and audible signal if an occupant of either front outboard position has not extended his lap belt to a specified length. Lap belts furnished under the second or third options must have emergency-locking or automatic-locking retractors at all outboard positions, front and rear. Shoulder belts furnished under the third option must have either manual adjustment or emergency-locking retractors.

On August 15, 1973, a passenger car will be required to provide one of two options for occupant protection: (1) Passive protection that meets the injury criteria in all impact modes at all seating positions; or (2) a system that provides passive protection for the front positions in a perpendicular frontal fixed barrier crash, that includes lap belts at all seating positions such that the injury criteria are met at the front positions both with and without lap belts fastened in a perpendicular frontal fixed barrier crash, and that has a seat belt warning system at the front outboard positions.

On and after August 15, 1975, a passenger car will be required to meet the injury criteria in all impact modes at all seating positions by passive means.

Multipurpose passenger vehicles and trucks with gross vehicle weight ratings of 10,000 pounds or less manufactured from January 1, 1972, to August 15, 1975, will have the option of meeting the injury criteria in all impact modes at all seating positions by passive means, or of providing a seatbelt assembly at each designated seating position. From August 15, 1975, to August 15, 1977, these vehicles will be required to meet one of the two options permitted passenger cars during the period August 15, 1973, to August 15, 1975. On and after August 15, 1977, they will be required to meet the full passive crash protection requirements that become effective for passenger cars on August 15, 1975. Forward control vehicles, however, may continue to use belt systems, and certain other specialized types of vehicles may continue to provide only head-on passive protection.

Multipurpose passenger vehicles and trucks with a GVWR of more than 10,000 pounds manufactured on or after January 1, 1972, will have the option of providing protection by passive means that meet all the crash protection requirements or of installing seat belt assemblies at all seating positions. Buses manufactured after January 1, 1972, will be required to provide one of these options for the driver's seating position.

The remainder of this preamble is separated into sections dealing with (I) the comments received in response to the September 25 proposal for the interim system, (II) the petitions for reconsideration of the November 3 rule on the requirements for later periods, and (III) the comments received and action taken

pursuant to the November 3 proposal for additional requirements.

I. The September 25 proposal specified a series of options for occupant protection in passenger cars manufactured on or after January 1, 1972. Each option represented a significant advance over the level of protection afforded occupants by present seat belt systems. Upon consideration of comments requesting postponement of the requirements, it has been determined that compliance with one or another of the options by January 1, 1972, is reasonable and practicable. In response to the comments and other available information, however, certain changes have been made.

In the proposal, the first option consisted of a passive protection system that would meet the injury criteria at all seating positions in a 30 m.p.h. perpendicular frontal impact. A large number of respondents (to this notice and to others dealt with herein), both within and outside of the concerned industries, took the position that the requirements for installation of seat belts should not be dropped until the vehicles in question provided protection in angular, lateral, and rollover crash modes, in addition to the direct frontal mode. After detailed consideration of these arguments and other available data, it has been determined that the added cost of seatbelt systems is justified, even where vehicles provide passive frontal-impact protection. Accordingly, the first option, the only one under which manufacturers are allowed not to provide seat belts in their vehicles, requires a passive protection system that meets the injury criteria in all of the impact modes mentioned above.

The second option set forth in the proposal consisted of Type 1 seatbelt assemblies with a warning system at the front outboard positions and Type 1 or Type 2 assemblies at the other positions. The front outboard positions were either to meet the injury criteria in a perpendicular impact by use of the belts, or be protected by energy absorbing materials conforming to amended requirements proposed for Standards Nos. 201 and 203. The latter alternative was the subject of several adverse comments, and in the light of these comments and the tentative nature of the proposed amendments to Standards Nos. 201 and 203, the alternative has been deleted. As adopted, the option provides that the front outboard positions must meet the injury criteria in a perpendicular fixed barrier crash with the test dummies restrained by Type 1 belts only. The wording that a vehicle should have "either a Type 1 or a Type 2" seatbelt assembly under this option has been changed to refer simply to Type 1 (lap belt) assemblies. A manufacturer may at his option provide upper torso restraints, which do or do not attach to the lap belts. The essence of the second option, however, is that the vehicle be designed to provide protection with lap belts alone, in view of their much higher level of public use in comparison with lap-and-shoulder combinations. Vehicles under this option,

therefore, must provide lap belts that are usable separately.

The third option proposed in the September 25 notice has been adopted with some changes. It consists of an improved combination of lap and shoulder belts in the front outboard seating positions, with lap belts in other positions. The belts and anchorages at the front outboard positions must be capable of restraining a dummy in a 30-m.p.h. frontal perpendicular impact without separation of the belts or their anchorages.

The seat belt warning system required under the second and third options has been modified somewhat in the light of the comments, to clarify the requirements and to restrict its operation to situations where the vehicle is likely to be in motion. The notice proposed that the system operate when the driver or right front passenger, or both, occupied the seat but did not fasten the belt about them. It was stated in several comments such systems operating through the buckle are relatively complex and that leadtime would be a significant problem. Upon evaluation of the comments, it has been decided to provide for warning system operation when the driver's belt is not extended to a length that will accommodate a 5th-percentile adult female, or when the right front passenger's seat is occupied and that belt is not extended far enough to fit a 50th-percentile 6-year-old. Keying the system to belt withdrawal is technologically simpler, and still provides protection against tampering. The notice had proposed that the system operate whenever the vehicle's ignition was in the "on" position. It was pointed out in the comments that situations arise in which the vehicle is at rest with the ignition on and the engine running, as when picking up or discharging passengers. To avoid the annoyance to vehicle occupants of the warning system in such situations, the standard provides that the system shall operate only if the ignition is in the "on" position and the transmission is in a drive position.

The seat belt system requirements have also been changed somewhat in response to comments. The notice had proposed to require retractors at all seating positions in those options specifying seat belts. Several comments stated that the installation of retractors at inboard positions would require extensive redesign of bench-type seats. In the light of the low occupancy rate for the center seats, the difficulties in meeting the requirement, and the short leadtime available, the requirement for center-position retractors has been omitted.

The requirement that the shoulder and pelvic restraints be releasable at a single point by a pushbutton-type action has been retained. The Administration considers that single-point release is essential to the convenient operation of the seat belts, and that standardization of the buckle release device is also important, particularly in emergency situations. However, the additional requirement for one-hand fastening by the

driver has been deleted. Adjustable bench seats would require major redesign in many cases, and it has been determined that the additional convenience afforded the driver would not be sufficient to justify the cost and leadtime problems that would result.

A number of comments noted that no dimensions were specified in the notice for the various occupants, and that there were no dimensions of this type in general use. To remedy the problem, the standard provides a table of dimensions for various sizes of adult occupants and 50th-percentile 6-year-olds. The latter set of dimensions has been adopted because of the availability of manikins at that size.

In response to several comments stating that the proposed 8-inch distance between the occupant's centerline and the intersection of the upper torso belt with the lap belt was too great, the distance has been reduced to 6 inches. It has been determined that a 6-inch distance will provide satisfactory protection and lessen the convenience problems that might be created with the greater distance.

II. With few exceptions, the petitions for reconsideration of the November 3 amendment requested that the requirement for mandatory passive protection be postponed. The length of postponement requested varied from 2 months to several years. After full consideration of the issues raised by the petitions, it has been decided to continue to require passive protection for the front seating positions of passenger cars in 1973. In order to ease the problem of model year scheduling, the date is changed from July 1, 1973, to August 15, 1973. The petitions did not offer sufficient reasons to change the Administration's position as set forth in previous notices in this docket, that passive protection systems are a vitally important step in reducing the death and injury toll on our highways, and that the relevant technology is sufficiently advanced to provide this basic protection, in accordance with the performance requirements and the time schedule that have been specified. The petitions that requested a postponement of all passive protection requirements beyond August 15, 1973, are therefore denied.

However, considerable data was presented in the petitions to the effect that the development of passive systems for the various impact modes has not proceeded at an equal rate. It appears that a number of manufacturers may be unable to comply with the lateral crash protection requirements in 1973. Accordingly, it has been decided to establish two restraint options for the front seating positions of passenger cars manufactured on or after August 15, 1973, and before August 15, 1975. A manufacturer may choose, first, to provide a passive system that meets the occupant crash protection requirements at all seating positions, in all impact modes. If he is unable to provide such full passive protection, he may choose to adopt a system that provides passive protection for the

front occupants in a head-on collision, and also, includes a lap belt at each seating position with a seatbelt warning system for the front outboard positions. Under this option, the injury criteria must be met at each front position in a perpendicular barrier crash up to 30 m.p.h., both with and without the lap belts fastened. This option thus resembles the second option permitted during the interim period, except that the injury criteria must also be met with the test dummies unrestrained, and at the front center position as well as the front outboard positions.

The date on which a passenger car must provide passive means of meeting the injury criteria in a side impact is changed to August 15, 1975, to reflect the greater leadtime needed to develop such passive systems. To provide uniform phasing, and allow time for development of passive protection in the angular-impact and rollover modes, the effective date for these requirements is also set at August 15, 1975. Thus, after August 15, 1975, each passenger car must meet the crash protection requirements at each seating position in all impact modes by means that require no action by vehicle occupants.

Petitions of manufacturers of multipurpose passenger vehicles and trucks with GVWR of 10,000 pounds or less stated that the trucking industry as a whole would need additional time to assimilate the experience of passenger car manufacturers, before passive systems could be properly installed on their vehicles. The Administration has determined that additional leadtime is required for these vehicles. The standard accordingly provides that the protection required for passenger cars in 1973 will be required for multipurpose passenger vehicles and trucks with a GVWR of 10,000 pounds or less on August 15, 1975. The protection required for passenger cars on August 15, 1975, will be required of these vehicles on August 15, 1977.

The notice of proposed rulemaking published on November 3, 1970, proposed to make the passive protection requirements applicable to open-body type vehicles. Review of the comments and the petitions for reconsideration leads to the conclusion that this type of vehicle, along with convertibles, walk-in van-type vehicles, motor homes, and chassis-mount campers cannot be satisfactorily equipped with a complete passive protection system. Accordingly, the standard provides that only the head-on passive protection system required for passenger cars in 1973 will be required for each of these types on August 15, 1977, and thereafter. It has been further determined that it may not be feasible to provide passive protection in some forward control vehicles, and such vehicles are therefore permitted the option of providing seat belt assemblies at all seating positions.

A number of petitions objected to the requirement for a minimum speed below which a crash-deployed system may not deploy. Upon consideration of the petitions, it has been determined that it is

preferable to allow manufacturers freedom in the design of their protective systems at all speeds, and this requirement is hereby deleted from the standard.

The injury criteria specified in the November 3 amendment were the subject of numerous petitions. The basic objections to the head injury criteria were that the 70g-3-millisecond requirement was too conservative, with respect to both acceleration levels and time factors. Review of these objections and a reevaluation of the information available to the Administration leads to the conclusion that the head injury criteria can be more appropriately based on the severity index described in the Society of Automotive Engineers Information Report J885(a), June 1966. Accordingly, the standard adopts as the criterion for head injury a severity index of 1,000 calculated by the method in the SAE report.

The severity index is based on biomechanical data derived from head injury studies and does not adapt itself readily to chest-injury usage. Several petitions stated that the chest injury criteria were set at too low a level. In some respects, a higher "g-level" on the chest actually increases the protective capabilities of the system, if properly designed, since it more effectively utilizes the available space in which the occupant can "ride down" the crash impact—an especially important factor in higher-speed crashes. Therefore, in accordance with data currently available, a chest tolerance level of 60g, except for a cumulative period of 3 milliseconds, is hereby adopted.

No data was received to support the contention of several petitioners that the upper leg load was too conservative. The maximum force level of 1,400 pounds appears well founded and is retained.

Several petitions objected to the condition that vehicles be tested at their gross vehicle weight rating. Upon review of the appropriateness of this requirement for passenger cars and a review of loading patterns on trucks, it has been decided to alter the condition to specify that passenger cars are tested at a weight that represents their unloaded vehicle weight (recently defined in the FEDERAL REGISTER of Feb. 5, 1971, 36 F.R. 2511) plus the weight of rated cargo capacity and the specified number of test devices. Trucks are to be tested at a weight that approximates a half-loaded vehicle, with the load secured in the cargo area, plus the specified number of test devices.

The use of the anthropomorphic test device described in SAE J963 was objected to by several petitioners, on the grounds that further specifications are needed to ensure repeatability of test results. The Administration finds no sufficient reason to alter its conclusion that the SAE specification is the best available. The NHTSA is sponsoring further research and examining all available data, however, with a view to issuance of further specifications for these devices.

In response to other comments with respect to test conditions, the test devices' hand positions are adjusted to reduce apparent test variability. Also, the frequency filtration criteria of SAE Recommended Practice J211 have been substituted for the filtration criteria employed in the November 3 notice.

III. The notice of proposed rulemaking issued on November 3, 1970, dealt with several aspects of the occupant protection standard for which changes contemplated by the Administration, after review of the comments to the May 7 notice, were thought to require additional opportunity for comment. These aspects included a proposed deletion of the exemption from the rollover requirements previously proposed for open-body type vehicles, the raising of the low-velocity deployment requirement from 10 to 15 m.p.h., the establishment of requirements for the lateral component of head and chest acceleration, and the amendment of the test conditions for the lateral impact and rollover requirements.

Since the subject of low speed deployment and the question of exemptions were also the subjects of petitions for reconsideration under the November 3 rule, the disposition of these matters has been noted in the preceding section. For the reasons given therein, the low-velocity deployment requirement has been omitted, and the exemptions have been expanded to include forward control vehicles, convertibles, walk-in van-type trucks, motor homes, and chassis-mount campers. These type descriptions are in general use among manufacturers to describe vehicles sharing certain well-defined characteristics. Definitions of these types of vehicles may, as found necessary in the future, be added to § 571.3 Definitions.

Upon review of the comments and other information available to the Administration, it has been decided that the establishment of requirements for the lateral component of head and chest acceleration is not feasible at this time. However, it is anticipated that biomechanical studies will shortly provide data regarding lateral tolerances on which a requirement can be based and that rulemaking action will thereupon resume.

The conditions proposed for the lateral impact and rollover tests have been adopted as proposed without significant change. Comments on the lateral impact test revealed no significant support for a fixed barrier collision of the type proposed in the May 7 notice, although several recommended use of the moving barrier specified in SAE Recommended Practice J972 and others requested that the height of the barrier be lowered from 65 inches to 36-38 inches as specified in SAE J972. The decision to retain the test and barrier dimensions as proposed in the November 3 notice was made after a full review of the SAE procedures.

The test as adopted is considered to afford greater repeatability than the SAE procedure, which permits a much more complex interaction between the barrier and the impacted vehicle. The height of

the barrier has been retained at 65 inches so that it will test the head impact protection afforded by the vehicle when struck by a surface extending to head height. Passenger compartment intrusion of the type that might result from use of a lower barrier is the subject of a separate rulemaking action on side door strength.

Some comments suggested that the wording of the proposed procedures, that the moving barrier undergo no deformation or nonlongitudinal movement, was unduly restrictive. The wording is not, however, intended to describe an actual test, but to establish the condition that the vehicle must be capable of meeting the stated requirements no matter how small the degree of deformation or nonlongitudinal movement of the barrier. This issue, in the case of the moving barrier, is thus analogous to that in the definition of "fixed collision barrier" (35 F.R. 11242, July 14, 1970). To more clearly reflect this position and the legal similarity of the two types of barriers, the word "significant" is added to the conditions relating to movement and deformation of the barrier.

Several comments stated that the rollover test would not produce repeatable results. Although refinements may be made in the procedure before the date on which rollover protection becomes mandatory, the Administration has determined that the test as adopted is more satisfactory than any other suggested thus far. The kinematics of a rollover type accident are such that variability in vehicle behavior may often be more visible than in other test procedures.

A number of other minor issues were raised by the petitions, and each has been carefully evaluated by the Administration. With respect to those objections and suggestions not specifically mentioned elsewhere in this notice, the petitions are hereby denied.

In light of the foregoing, Motor Vehicle Safety Standard No. 208 in § 571.21 of Title 49, Code of Federal Regulations, is amended to read as follows, with effective dates as specified in the text of the standard. This amendment is issued under the authority of sections 103, 108, 112, 114, and 119 of the National Traffic and Motor Vehicle Safety Act, 15 U.S.C. 1392, 1347, 1401, 1403, 1407, and the delegation of authority at 49 CFR 1.51.

Issued on March 3, 1971.

DOUGLAS W. TOMS,
Acting Administrator.

§ 571.21 Federal Motor Vehicle Safety Standards.

MOTOR VEHICLE SAFETY STANDARD NO. 208
OCCUPANT CRASH PROTECTION

S1. Scope. This standard specifies performance requirements for the protection of vehicle occupants in crashes.

S2. Purpose. The purpose of this standard is to reduce the number of deaths of vehicle occupants, and the severity of injuries, by specifying vehicle crashworthiness requirements in

terms of forces and accelerations measured on anthropomorphic dummies in test crashes, and by specifying equipment requirements for active and passive restraint systems.

S3. Application. This standard applies to passenger cars, multipurpose passenger vehicles, trucks, and buses.

S4. General requirements.

S4.1 Passenger cars.

S4.1.1 Passenger cars manufactured from January 1, 1972, to August 14, 1973. Each passenger car manufactured from January 1, 1972, to August 14, 1973, inclusive, shall meet the requirements of S4.1.1.1, S4.1.1.2, or S4.1.1.3. A protection system that meets the requirements of S4.1.1.1 or S4.1.1.2 may be installed at one or more designated seating positions of a vehicle that otherwise meets the requirements of S4.1.1.3.

S4.1.1.1 First option—complete passive protection system. The vehicle shall meet the crash protection requirements of S5 by means that require no action by vehicle occupants.

S4.1.1.2 Second option—lap belt protection system with belt warning. The vehicle shall—

(a) At each designated seating position, have a Type 1 seat belt assembly that conforms to Standard No. 209 and to S7.1 and S7.2 of this standard;

(b) At each front outboard designated seating position, have a seat belt warning system that conforms to S7.3; and

(c) Meet the frontal crash protection requirements of S5.1, in a perpendicular impact, with respect to anthropomorphic test devices in each front outboard designated seating position restrained only by Type 1 seat belt assemblies.

S4.1.1.3 Third option—lap and shoulder belt protection system with belt warning.

S4.1.1.3.1 Except for convertibles and open-body vehicles, the vehicle shall—

(a) At each front outboard designated seating position have a Type 2 seatbelt assembly that conforms to Standard No. 209 and S7.1 and S7.2 of this standard, with either an integral or detachable upper torso portion, and a seatbelt warning system that conforms to S7.3;

(b) At each designated seating position other than the front outboard positions, have a Type 1 or Type 2 seat belt assembly that conforms to Standard No. 209 and to S7.1 and S7.2 of this standard; and

(c) When it perpendicularly impacts a fixed collision barrier, while moving longitudinally forward at any speed up to and including 30 m.p.h., under the test conditions of S8.1 with anthropomorphic test devices at each front outboard position restrained by Type 2 seatbelt assemblies, experience no complete separation of any load-bearing element of a seatbelt assembly or anchorage.

S4.1.1.3.2 Convertibles and open-body type vehicles shall at each designated seating position have a Type 1 or Type 2 seatbelt assembly that conforms to Standard No. 209 and to S7.1 and S7.2 of this standard, and at each front outboard designated seating position have a

seatbelt warning system that conforms to S7.3.

S4.1.2 Passenger cars manufactured from August 15, 1973 to August 14, 1975. Passenger cars manufactured from August 15, 1973, to August 14, 1975, inclusive, shall meet the requirements of S4.1.2.1 or S4.1.2.2. A protection system that meets the requirements of S4.1.2.1 may be installed at one or more designated seating positions of a vehicle that otherwise meets the requirements of S4.1.2.2.

S4.1.2.1 First option—complete passive protection system. The vehicle shall meet the crash protection requirements of S5 by means that require no action by vehicle occupants.

S4.1.2.2 Second option—head-on passive protection system. The vehicle shall—

(a) At each designated seating position, have a Type 1 seatbelt assembly that conforms to Standard No. 209 and to S7.1 and S7.2 of this standard;

(b) At each front designated seating position, meet the frontal crash protection requirements of S5.1, in a perpendicular impact, by means that require no action by vehicle occupants;

(c) At each front designated seating position, meet the frontal crash protection requirements of S5.1, in a perpendicular impact, with a test device restrained by a Type 1 seatbelt assembly; and

(d) At each front outboard designated seating position, have a seatbelt warning system that conforms to S7.3.

S4.1.3 Passenger cars manufactured on or after August 15, 1975. Each passenger car manufactured on or after August 15, 1975, shall meet the occupant crash protection requirements of S5 by means that require no action by vehicle occupants.

S4.2 Trucks and multipurpose passenger vehicles with GVWR of 10,000 pounds or less.

S4.2.1 Trucks and multipurpose passenger vehicles, with GVWR of 10,000 pounds or less, manufactured from January 1, 1972, to August 14, 1975. Each truck and multipurpose passenger vehicle with a gross vehicle weight rating of 10,000 pounds or less, manufactured from January 1, 1972, to August 14, 1975, inclusive, shall meet the requirements of S4.2.1.1 or S4.2.1.2. A protection system that meets the requirements of S4.2.1.1 may be installed at one or more designated seating positions of a vehicle that otherwise meets the requirements of S4.2.1.2.

S4.2.1.1 First option—complete passive protection system. The vehicle shall meet the crash protection requirements of S5 by means that require no action by vehicle occupants.

S4.2.1.2 Second option—belt system. The vehicle shall have seat belt assemblies that conform to Standard 209 installed as follows:

(a) A Type 1 or Type 2 seat belt assembly shall be installed for each designated seating position in convertibles, open-body type vehicles, and walk-in van-type trucks.

(b) In all vehicles except those for which requirements are specified in S4.2.1.2(a), a Type 2 seat belt assembly shall be installed for each outboard designated seating position that includes the windshield header within the head impact area, and a Type 1 or Type 2 seat belt assembly shall be installed for each other designated seating position.

S4.2.2 Trucks and multipurpose passenger vehicles, with GVWR of 10,000 pounds or less, manufactured from August 15, 1975, to August 14, 1977. Each truck and multipurpose passenger vehicle, with a gross vehicle weight rating of 10,000 pounds or less, manufactured from August 15, 1975, to August 14, 1977, inclusive, shall meet the requirements of S4.1.2 (as specified for passenger cars), except that forward control vehicles, convertibles, open-body type vehicles, walk-in van-type trucks, motor homes, and vehicles carrying chassis-mount campers may instead meet the requirements of S4.2.1.2.

S4.2.3 Trucks and multipurpose passenger vehicles, with GVWR of 10,000 pounds or less, manufactured on or after August 15, 1977. Each truck and multipurpose passenger vehicle, with a gross vehicle weight rating of 10,000 pounds or less, manufactured on or after August 15, 1977, shall meet the occupant crash protection requirements of S5 by means that require no action by vehicle occupants, except that forward control vehicles may instead meet the requirements of S4.2.1.2, and convertibles, open-body vehicles, walk-in van-type trucks, motor homes, and vehicles carrying chassis-mount campers may instead meet the requirements of S4.1.2.2.

S4.3 Trucks and multipurpose passenger vehicles, with GVWR of more than 10,000 pounds. Each truck and multipurpose passenger vehicle, with a gross vehicle weight rating of more than 10,000 pounds, manufactured on or after January 1, 1972, shall meet the requirements of S4.3.1 or S4.3.2. A protection system that meets the requirements of S4.3.1 may be installed at one or more designated seating positions of a vehicle that otherwise meets the requirements of S4.3.2.

S4.3.1 First option—complete passive protection system. The vehicle shall meet the crash protection requirements of S5 by means that require no action by vehicle occupants.

S4.3.2 Second option—belt system. The vehicle shall, at each designated seating position, have either a Type 1 or a Type 2 seat belt assembly that conforms to Standard No. 209,

S4.4 Buses. Each bus manufactured on or after January 1, 1972, shall meet the requirements of S4.4.1 or S4.4.2.

S4.4.1 First option—complete passive protection system—driver only. The vehicle shall meet the crash protection requirements of S5, with respect to an anthropomorphic test device in the driver's designated seating position, by means that require no action by vehicle occupants.

S4.4.2 Second option—belt system—driver only. The vehicle shall, at the

driver's designated seating position, have either a Type 1 or a Type 2 seatbelt assembly that conforms to Standard No. 209.

S4.5 Other general requirements.

S4.5.1 Labeling and driver's manual information. Each vehicle shall have a label setting forth the manufacturer's recommended schedule, specified by month and year, for the maintenance or replacement, necessary to retain the performance required by this standard, of any crash-deployed occupant protection system. The label shall be permanently affixed to the vehicle within the passenger compartment and lettered in English in block capitals and numerals not less than three thirty-seconds of an inch high. Instructions concerning maintenance or replacement of the system and a description of the functional operation of the system shall be provided with each vehicle, with an appropriate reference on the label. If a vehicle owner's manual is provided, this information shall be included in the manual.

S4.5.2 Readiness indicator. An occupant protection system that deploys in the event of a crash shall have a monitoring system with a readiness indicator. The system components monitored shall include all electrical circuits and compressed gases, if present. The indicator shall monitor its own readiness and shall be clearly visible from the driver's designated seating position. A list of the elements of the system being monitored by the indicator shall be included with the information furnished in accordance with S4.5.1, but need not be included on the label.

S5. Occupant crash protection requirements.

S5.1 Frontal barrier crash. When the vehicle, traveling longitudinally forward at any speed up to and including 30 m.p.h., impacts a fixed collision barrier that is perpendicular to the line of travel of the vehicle, or at any angle up to 30° in either direction from the perpendicular to the line of travel of the vehicle, under the applicable conditions of S8, with anthropomorphic test devices at each designated seating position, it shall meet the injury criteria of S6.

S5.2 Lateral moving barrier crash. When the vehicle is impacted laterally on either side by a barrier moving at 20 m.p.h., with test devices at the outboard designated seating positions adjacent to the impacted side, under the applicable conditions of S8, it shall meet the injury criteria of S6.

S5.3 Rollover. When the vehicle is subjected to a rollover test in either lateral direction at 30 m.p.h. with test devices in the outboard designated seating positions on its lower side as mounted on the test platform, under the applicable conditions of S8, it shall meet the injury criteria of S6.1.

S6 Injury criteria.

S6.1 All portions of the test device shall be contained within the outer surfaces of the vehicle passenger compartment throughout the test.

S6.2 The resultant acceleration at the center of gravity of the head shall not

exceed a severity index of 1,000, calculated by the method described in SAE Information Report J885a, October 1966.

S6.3 The resultant acceleration at the center of gravity of the upper thorax shall not exceed 60g, except for intervals whose cumulative duration is not more than 3 milliseconds.

S6.4 The force transmitted axially through each upper leg shall not exceed 1,400 pounds.

S7. *Seat belt assembly requirements—passenger cars.*

S7.1 *Adjustment.*

S7.1.1 Except as specified in S7.1.1.1, S7.1.1.2, and S7.1.1.3, any seat belt assembly furnished in accordance with S4.1.1 or S4.1.2 shall adjust to fit persons whose dimensions range from those of a 50th-percentile 6-year-old child to those of a 95th-percentile adult male, with the seat in any position and the seat back in the manufacturer's nominal design riding position, and shall adjust by means of an emergency-locking retractor or an automatic-locking retractor that conforms to Standard No. 209.

S7.1.1.1 A seat belt assembly installed at the driver's seating position shall adjust to fit persons whose dimensions

range from those of a 5th-percentile adult female to those of a 95th-percentile adult male.

S7.1.1.2 A seat belt assembly installed at any designated seating position other than the outboard positions shall adjust either by a retractor as specified in S7.1.1 or by a manual adjusting device that conforms to Standard No. 209.

S7.1.1.3 The upper torso portion of a seat belt assembly shall adjust either by an emergency-locking retractor as specified in S7.1.1 or by a manual adjusting device that conforms to Standard No. 209.

S7.1.2 The intersection of the upper torso belt with the lap belt in any Type 2 seatbelt assembly furnished in accordance with S4.1.1 or S4.1.2, adjusted in accordance with the manufacturer's instructions, shall be at least 6 inches from the front vertical centerline of a 50th-percentile adult male occupant, measured along the centerline of the lap belt, with the seat in its rearmost and lowest adjustable position and with the seat back in the manufacturer's nominal design riding position.

S7.1.3 The weights and dimensions of the vehicle occupants specified in this standard are as follows:

	50th-percentile 6-year old child	5th-percentile adult female	50th-percentile adult male	95th-percentile adult male
Weight	47.3 pounds	102 pounds	164 pounds	215 pounds
Erect sitting height	25.4 inches	30.9 inches	35.7 inches	38 inches
Hip breadth (sitting)	8.4 inches	12.8 inches	14.5 inches	16.4 inches
Hip circumference (sitting)	23.9 inches	36.4 inches	42 inches	47.2 inches
Waist circumference (sitting)	20.8 inches	23.6 inches	33 inches	42.5 inches
Chest depth		7.5 inches	9 inches	10.5 inches
Chest circumference:				
(nipple)		30.5 inches	37.7 inches	44.5 inches
(upper)		29.8 inches		
(lower)		26.6 inches		

S7.2 *Latch mechanism.* A seat belt assembly installed in a passenger car shall have a latch mechanism—

(a) Whose components are accessible to a seated occupant in both the stowed and operational positions;

(b) That releases both the upper torso restraint and the lap belt simultaneously, if the assembly has an upper torso restraint that requires unlatching for release of the occupant; and

(c) That releases at a single point by a pushbutton action.

S7.3 *Seat belt warning system.*

S7.3.1 Seat belt assemblies provided at the front outboard seating positions in accordance with S4.1.1 or S4.1.2 shall have a warning system that activates a continuous or intermittent audible signal and a continuous or flashing warning light, visible to the driver, displaying the words "Fasten seat belts" when and only when condition (a), and either of conditions (b) or (c), exist simultaneously:

(a) The vehicle ignition switch is in the "on" position and the transmission gear selector is in any forward or reverse position.

(b) The pelvic restraint portion of the driver's seat belt assembly is not extended at least to the degree necessary to fit a 5th-percentile adult female, when the seat is in the rearmost and lowest adjustment position.

(c) A person of at least the weight of a 50th-percentile 6-year-old child is seated in the right front designated seating position and the pelvic restraint

portion of the seat belt assembly for that position is not extended at least to the degree necessary to fit such a person, when the seat is in the rearmost and lowest adjustment position.

S8. *Test conditions.*

S8.1 *General conditions.* The following conditions apply to the frontal, lateral, and rollover tests.

S8.1.1 The vehicle, including test devices and instrumentation, is loaded as follows:

(a) *Passenger cars.* A passenger car is loaded to its unloaded vehicle weight plus its rated cargo and luggage capacity weight, secured in the luggage area, plus the weight of the necessary anthropomorphic test devices.

(b) *Multipurpose passenger vehicles, trucks, and buses.* A multipurpose passenger vehicle, truck, or bus is loaded to its unloaded vehicle weight plus 50 percent of the difference between its unloaded vehicle weight and its gross vehicle weight rating, secured in the load carrying area and distributed as nearly as possible in proportion to its gross axle weight ratings, plus the weight of the necessary anthropomorphic test devices.

S8.1.2 Adjustable seats are in the adjustment position midway between the forwardmost and rearmost positions, and if separately adjustable in a vertical direction, are at the lowest position.

S8.1.3 Adjustable seat backs are in the manufacturer's nominal design riding position.

S8.1.4 Adjustable steering controls are adjusted so that the steering wheel hub is at the geometric center of the locus it describes when it is moved through its full range of driving positions.

S8.1.5 Movable vehicle windows and vents are in the fully closed position.

S8.1.6 Convertibles and open-body type vehicles have the top, if any, in place in the closed passenger compartment configuration.

S8.1.7 Doors are fully closed and latched but not locked.

S8.1.8 Anthropomorphic test devices conform to the requirements of SAE Recommended Practice J963, June 1968, and have a pelvic structure that conforms to Figure 1. The weights, dimensions and centers of gravity specified in SAE J963 for the test device segments are determined with all instrumentation in place.

S8.1.9 Each test device is clothed in form-fitting cotton stretch garments.

S8.1.10 Limb joints are set at 1g, barely restraining the weight of the limb when extended horizontally. Leg joints are adjusted with the torso in the supine position. Articulated head, neck, and torso joints do not move at a horizontal acceleration load of 1g, in the test position, but move at a horizontal acceleration load of 2g.

S8.1.11 Each test device is firmly placed in a designated seating position in the following manner.

(a) The head is aligned by placing the test device on its back on a rigid, level surface and by adjusting the head so that it touches the level surface and is laterally centered with respect to the device's axis of symmetry.

(b) The test device is placed in the vehicle in the normal upright sitting posture, and a rigid roller, 6 inches in diameter and 24 inches long, is placed transversely as low as possible against the front of the torso.

(c) The roller is pressed horizontally against the torso with a force of 50 pounds.

(d) Force is applied at the shoulder level to bend the torso forward over the roller, flexing the lower back, and to return the test device to the upright sitting posture.

(e) The roller is slowly released.

S8.1.12 Except as otherwise herein specified, the test devices are not restrained during impacts by any means that require occupant action.

S8.1.13 The hands of the test device in the driver's designated seating position are on the steering wheel rim at the horizontal centerline. The right foot is at 90° to the tibia and rests on the brake pedal with the longitudinal axis of the tibia directed at the geometric center of the brake pedal pad. The left leg is placed as in S8.1.14.

S8.1.14 The hands of each other test device are resting on the seat with the palms touching the legs, and the upper arms are resting against the seat back and flush with the body. Where possible, the legs are outstretched, with the thighs on the seat and the heels touching the floor with the foot at 90° to the tibia. Otherwise, the tibia are vertical with the feet resting on the floor. The left leg of

a test device in the center front designated seating position is on the vehicle centerline, and the right leg is in the right footwell. The left and right legs of a test device in the center rear designated seating position are in the left and right footwells, respectively.

S8.1.15 A load sensing device is installed in each upper leg, 4.25 inches from the knee's axis of rotation, so that all force transmitted from the knee to the upper leg is measured.

S8.1.16 Acceleration sensing devices are installed in each test device to measure orthogonal accelerations at the centers of gravity of the head and upper thorax.

S8.1.17 The output of acceleration and load sensing devices is recorded in individual data channels that conform to the requirements of SAE Recommended Practice J211, October 1970, with channel classes as follows:

- (a) Head acceleration—1,000 Hz.
- (b) Upper thorax acceleration—180 Hz.
- (c) Upper leg force—600 Hz.

S8.1.18 The sensing devices are rigidly attached to the test devices by mountings that have no resonance frequency within the frequency-range of the specified channel class.

S8.1.19 Instrumentation does not affect the motion of test devices during impact or rollover.

S8.2 *Lateral moving barrier crash test conditions.* The following conditions apply to the lateral moving barrier crash test.

S8.2.1 The moving barrier, including the impact surface, supporting structure, and carriage, weighs 4,000 pounds.

S8.2.2 The impact surface of the barrier is a vertical, rigid, flat rectangle, 78 inches wide and 60 inches high, perpendicular to its direction of movement, with its lower edge horizontal and 5 inches above the ground surface.

S8.2.3 During the entire impact sequence the barrier undergoes no significant amount of dynamic or static deformation, and absorbs no significant portion of the energy resulting from the impact, except for energy that results in translational rebound movement of the barrier.

S8.2.4 During the entire impact sequence the barrier is guided so that it travels in a straight line, with no significant lateral, vertical or rotational movement.

S8.2.5 The concrete surface upon which the vehicle is tested is level, rigid and of uniform construction, with a skid number of 75 when measured in accordance with American Society for Testing and Materials Method E-274-65T at 40 m.p.h., omitting water delivery as specified in paragraph 7.1 of that method.

S8.2.6 The tested vehicle's brakes are disengaged and the transmission is in neutral.

S8.2.7 The barrier and the test vehicle are positioned so that at impact—

- (a) The vehicle is at rest in its normal attitude;
- (b) The barrier is traveling in a direction perpendicular to the longitudinal axis of the vehicle at 20 m.p.h.; and
- (c) A vertical plane through the geometric center of the barrier impact sur-

face and perpendicular to that surface passes through the driver's seating reference point in the tested vehicle.

S8.3 *Rollover test conditions.* The following conditions apply to the rollover test.

S8.3.1 The tested vehicle's brakes are disengaged and the transmission is in neutral.

S8.3.2 The concrete surface on which the test is conducted is level, rigid, of uniform construction, and of a sufficient size that the vehicle remains on it throughout the entire rollover cycle. It has a skid number of 75 when measured in accordance with American Society of Testing and Materials Method E-274-65T at 40 m.p.h. omitting water delivery as specified in paragraph 7.1 of that method.

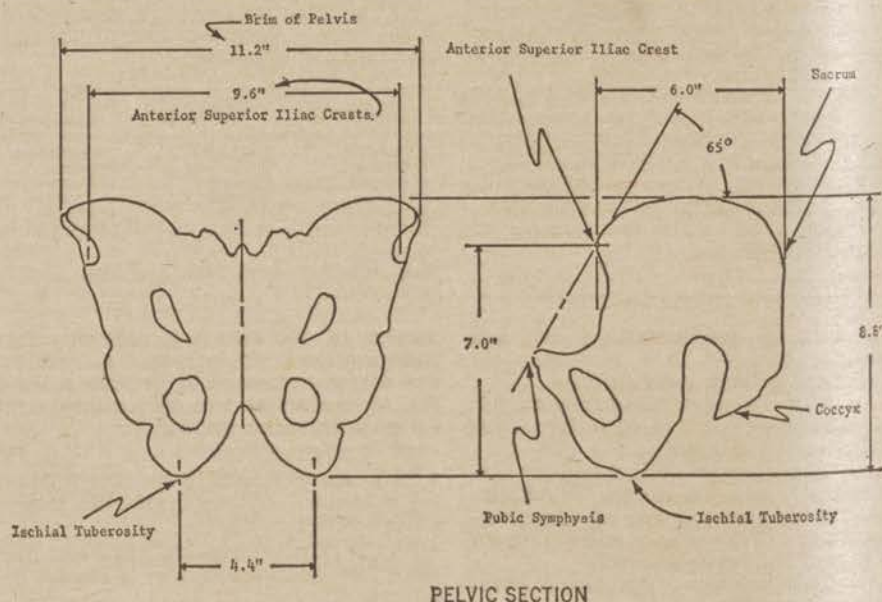
S8.3.3 The vehicle is placed on a device, similar to that illustrated in Figure 2, having a platform in the form of a flat, rigid plane at an angle of 23° from the horizontal. At the lower edge of the platform is an unyielding flange, perpendicular to the platform with a height

of 4 inches and a length sufficient to hold in place the tires that rest against it. The intersection of the inner face of the flange with the upper face of the platform is 9 inches above the rollover surface. No other restraints are used to hold the vehicle in position during the deceleration of the platform and the departure of the vehicle.

S8.3.4 With the vehicle on the test platform, the test devices remain as nearly as possible in the posture specified in S8.1.

S8.3.5 Before the deceleration pulse, the platform is moving horizontally, and perpendicularly to the longitudinal axis of the vehicle, at a constant speed of 30 m.p.h. for a sufficient period of time for the vehicle to become motionless relative to the platform.

S8.3.6 The platform is decelerated from 30 to 0 m.p.h. in a distance of not more than 3 feet, without change of direction and without transverse or rotational movement during the deceleration of the platform and the departure of the vehicle. The deceleration rate is at least 20g for a minimum of 0.04 seconds.



PELVIC SECTION

50TH PERCENTILE MALE ANTHROPOMORPHIC TEST DEVICE

FIGURE 1

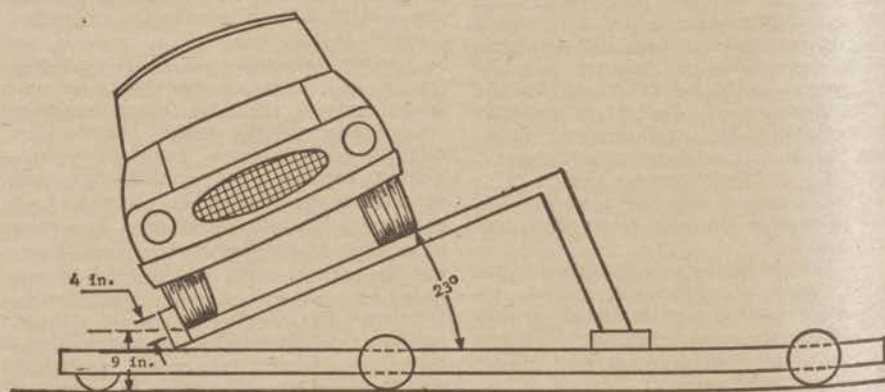


FIGURE 2 - TYPICAL DEVICE FOR ROLLOVER TEST

[FR Doc.71-3258 Filed 3-9-71;8:45 am]

[Docket No. 69-23; Notice 2]

PART 571—FEDERAL MOTOR VEHICLE SAFETY STANDARDS**Seat Belt Assemblies in Passenger Cars, Multipurpose Passenger Vehicles, Trucks, and Buses**

This notice amends Federal Motor Vehicle Safety Standard No. 209 in § 571.21 of Title 49 of the Code of Federal Regulations, to upgrade the requirements for seatbelt assemblies for use in passenger cars, multipurpose passenger vehicles, trucks, and buses. As amended, the standard is both an equipment and a vehicle standard. The equipment aspect applies to a seatbelt assembly manufactured on or after the effective date. The vehicle aspect applies to an assembly installed in a vehicle manufactured on or after the effective date, regardless of when the assembly was manufactured.

During the period since the original issuance of Standard No. 209, laboratory tests and experience with actual seatbelt usage have disclosed areas where improvements in performance requirements are necessary. Consequently, a notice of proposed amendments to the standard was published on March 17, 1970 (35 F.R. 4641) to upgrade the performance requirements for seatbelt assemblies. Interested persons were given an opportunity to comment on the contents of the proposed rule. These comments, and other available data, have been carefully considered in the development of these amendments.

Paragraph (S4.1(f)) of the standard is amended to make it clear that a manufacturer may use bolts other than the specified bolts if the substituted bolts are equivalent.

The standard formerly required a Type 1 or Type 2 seatbelt assembly to be adjustable to fit an occupant with the weight and dimensions of a 95th-percentile adult male. To insure that belt assemblies can be adjusted to fit the range of occupants who may use them, paragraph S4.1(g) is amended to require each Type 1 or Type 2 seatbelt assembly to be adjustable to fit occupants whose weight and dimensions range from those of a 5th-percentile adult female to those of a 95th-percentile adult male. A belt assembly installed for an adjustable seat must conform to the requirements regardless of seat position. Several comments noted that no dimensions were specified in the notice for the various occupants which a belt assembly must fit. To remedy the problem, the standard provides a table of weights and dimensions for 5th-percentile adult females and 95th-percentile adult males.

In the notice, it was proposed to reduce the force required to release seat belt buckles from 30 to 22.5 pounds and to require that the release force for pushbutton-type buckles be applied no closer than 0.125 inch from the edge of the pushbutton access opening. In light of comments received, and other available information, the value of 30 pounds has been retained. The procedure for testing the buckle release force of a pushbutton-type buckle has been amended as proposed, however, to insure that the release

force will not be applied so close to the edge of the access opening that the button might tilt in a manner unrepresentative of actual use conditions and thereby exaggerate the release force.

The buckle crush release requirements are amended to extend the standard's crush release requirements to all Type 1 and Type 2 seatbelt buckles, and to require application of the test load to areas of a buckle other than directly over the center of the release mechanism. Experience has indicated that non-pushbutton buckle release mechanisms are also subject to impairment when compressed, and occupants using such buckles are therefore provided equivalent protection by the extension of the buckle crush release requirements. In laboratory tests on pushbutton-type buckles, buckle release or malfunction occurred when a compressive force as low as 275 pounds was applied to a surface area other than the area directly over the pushbutton. The amended test will tend to eliminate buckle designs that are prone to accidental damage, or that release during the initial phase of the accident.

The notice proposed a new buckle latch test procedure in which a specified tensile load was to be applied at 30° to the buckle. In the light of comments received and other information that has become available indicating that the requirement was not justified, the procedure has not been adopted.

In response to comments that the acceleration levels proposed in the notice were too high, the acceleration level above which an emergency-locking retractor must lock has been reduced from 2g, as proposed, to 0.7g, and the acceleration level below which the retractor must not lock has been reduced from 1g to 0.3g. For reasons of occupant convenience, the notice proposed that the required upper limit on acceleration had to be met only when the webbing was extended to the length necessary to fit a 5th-percentile adult female. Upon review it has been determined that the proposed free travel distance could make a belt unsafe for use by a child, and, further, that an adequate measure of convenience is provided by the requirement that a belt not lock at accelerations of less than 0.3g. Accordingly, the standard does not limit the belt withdrawal range within which the acceleration levels must be met. For similar reasons, the retraction force requirements are required to be met regardless of the amount of belt withdrawal.

As stated in the notice, the hex-bar abrasion test does not adequately simulate the type of webbing abrasion caused by some buckles. The standard as amended retains the hex-bar test, but supplements it with an additional abrasion requirement, under which webbing is required to retain at least 75 percent of its breaking strength after being repeatedly passed through the assembly buckle or manual adjustment device.

Effective date: September 1, 1971.

In consideration of the foregoing, Motor Vehicle Safety Standard No. 209 in § 571.21 of Title 49, Code of Federal Regulations, is amended as set forth

below. This amendment is issued under the authority of sections 103, 112, and 119 of the National Traffic and Motor Vehicle Safety Act, 15 U.S.C. 1392, 1401, 1407 and the delegation of authority at 49 CFR 1.51.

Issued on March 3, 1971.

DOUGLAS W. TOMS,
Acting Administrator.

I. Paragraph S2. is revised as follows:
S2. Application.

This standard applies to passenger cars, multipurpose passenger vehicles, trucks, and buses and to seat belt assemblies for use in those types of vehicles.

II. Subparagraphs (f) and (g) of paragraph S4.1 are revised as follows:

(f) *Attachment hardware.* A seat belt assembly shall include all hardware necessary for installation in a motor vehicle in accordance with SAE Recommended Practice J800B, Motor Vehicle Seat Belt Installations, September 1965. However, seat belt assemblies designed for installation in motor vehicles equipped with seat belt assembly anchorages that conform to Federal Motor Vehicle Safety Standard No. 210 and that do not require anchorage nuts, plates, or washers, need not have such hardware, but shall have $\frac{1}{16}$ -20 UNF-2A or $\frac{1}{2}$ -13 UNC-2A attachment bolts or equivalent hardware. The hardware shall be designed to prevent attachment bolts and other parts from becoming disengaged from the vehicle while in service. Reinforcing plates or washers furnished for universal floor installations shall be of steel, free from burrs and sharp edges on the peripheral edges adjacent to the vehicle, at least 0.6 inch in thickness and at least 4 square inches in projected area. The distance between any edge of the plate and the edge of the bolt hole shall be at least 0.6 inch. Any corner shall be rounded to a radius of not less than 0.25 inch or cut so that no corner angle is less than 135° and no side is less than 0.25 inch in length.

(g) *Adjustment.* (1) A Type 1 or Type 2 seat belt assembly shall be capable of adjustment to fit occupants whose dimensions and weight range from those of a 5th-percentile adult female to those of a 95th-percentile adult male. The seat belt assembly shall have either an automatic-locking retractor, an emergency-locking retractor, or an adjusting device that is within the reach of the occupant. A Type 3 seat belt assembly shall be capable of adjustment to fit any child capable of sitting upright and weighing not more than 50 pounds, unless it is specifically labeled for use on a child in a smaller weight range.

(2) A Type 1 or Type 2 seat belt assembly for use in a vehicle having seats that are adjustable shall conform to the requirements of S4.1(g)(1) regardless of seat position. However, if a seat has a back that is separately adjustable, the requirements of S4.1(g)(1) need be met only with the seat back in the manufacturer's nominal design riding position.

(3) The adult occupants referred to in S4.1(g)(1) shall have the following measurements:

	5th-percentile adult female	95th-percentile adult male
Weight.....	102 pounds.	215 pounds.
Erect sitting height.....	30.9 inches.	38 inches.
Hip breadth (sitting).....	12.8 inches.	16.4 inches.
Hip circumference (sitting).....	36.4 inches.	47.2 inches.
Waist circumference (sitting).....	23.6 inches.	42.5 inches.
Chest depth.....	7.5 inches.	10.5 inches.
Chest circumference:		
(nipple).....	30.5 inches.	
(upper).....	29.8 inches.	44.5 inches.
(lower).....	26.6 inches.	

III. Subparagraph (d) and (j) of paragraph S4.3 are revised as follows:

(d) *Buckle release.* * * *

(3) The buckle of a Type 1 or Type 2 seat belt assembly shall not release under a compressive force of 400 pounds applied as prescribed in paragraph S5.2(d)(3). The buckle shall be operable and shall meet the applicable requirements of paragraph S4.4 after the compressive force has been removed.

(j) *Emergency-locking retractor.* An emergency-locking retractor of a Type 1 or Type 2 seat belt assembly, when tested in accordance with the procedures specified in paragraph S5.2(j)—

(i) Shall lock before the webbing extends 1 inch when the retractor is subjected to an acceleration of 0.7g;

(ii) Shall not lock when the retractor is subjected to an acceleration of 0.3g or less.

(iii) Shall exert a retractive force of at least 1.5 pounds under zero acceleration when attached to a pelvic restraint; and

(iv) Shall exert a retractive force of not less than 0.45 pound and not more than 1.1 pounds under zero acceleration upon any strap or webbing that contacts the shoulder when the retractor is attached to an upper torso restraint.

IV. Paragraph S4.2(d) is revised to read as follows:

(d) *Resistance to abrasion.* The webbing of a seatbelt assembly, after being subjected to abrasion as specified in either S5.1(d) or S5.3(d), shall have a breaking strength of not less than 75 percent of the breaking strength listed in S4.2(b) for that type of belt assembly.

V. Subsections (1) and (3) of subparagraph (d) and subparagraph (j) of paragraph S5.2 are revised as follows:

(d) *Buckle release.* (1) Three seatbelt assemblies shall be tested to determine compliance with the maximum buckle release force requirements, following the assembly test in S5.3. After subsection to the force applicable for the assembly being tested, the force shall be reduced and maintained at 150 pounds on the assembly loop of a Type 1 seatbelt assembly, 75 pounds on the components of a Type 2 seatbelt assembly, or 45 pounds on a Type 3 seatbelt assembly. The buckle release force shall be measured by applying a force on the buckle in a manner and direction typical of those which would be employed by a seatbelt occupant. For pushbutton-release buckles, the force shall be applied at least 0.125 inch from the edge of the pushbutton access opening of the buckle in

a direction that produces maximum releasing effect. For lever-release buckles, the force shall be applied on the centerline of the buckle level or finger tab in a direction that produces maximum releasing effect.

(3) The buckle of a Type 1 or Type 2 seatbelt assembly shall be subjected to a compressive force of 400 pounds applied anywhere on a test line that is coincident with the centerline of the belt extended through the buckle or on any line that extends over the center of the release mechanism and intersects the extended centerline of the belt at an angle of 60°. The load shall be applied by using a curved cylindrical bar having a cross section diameter of 0.75 inch and a radius of curvature of 6 inches, placed with its longitudinal centerline along the test line and its center directly above the point on the buckle to which the load will be applied. The buckle shall be latched, and a tensile force of 75 pounds shall be applied to the connected webbing during the application of the compressive force. Buckles from three seatbelt assemblies shall be tested to determine compliance with paragraph S4.3(d)(3).

(j) *Emergency-locking retractor.* A retractor shall be tested in a manner that permits the retraction force to be determined exclusive of the gravitational forces on hardware or webbing being retracted. The webbing shall be fully extended from the retractor, passing over or through any hardware or other material specified in the installation instructions. While the webbing is being retracted, the lowest force of retraction within plus or minus 2 inches of 75 percent extension shall be determined. The retractor shall be subjected to an acceleration of 0.3g within a period of 50 milliseconds while the webbing is a 75 percent extension, to determine compliance with S4.3(j)(1)(ii). The retractor shall be subjected to an acceleration of 0.7g within a period of 50 milliseconds, while the webbing is a 75 percent extension, and the webbing movement before locking shall be measured under the following conditions: For a retractor sensitive to webbing withdrawal, the retractor shall be accelerated in the direction of webbing retraction while the retractor drum's central axis is oriented horizontally and at angles of 45°, 90°, 135°, and 180° to the horizontal plane. For a retractor sensitive to vehicle acceleration, the retractor shall be accelerated in three directions normal to each other while the retractor drum's central axis is oriented horizontally and at angles of 45°, 90°, 135°, and 180° to the horizontal plane.

VI. Paragraph S5.3 is revised by adding the following new subparagraph:

(d) *Resistance to buckle abrasion.* Seatbelt assemblies shall be tested for resistance to abrasion by each buckle or manual adjusting device normally used to adjust the size of the assembly. The webbing of the assembly to be used in this test shall be exposed for 4 hours to an atmosphere having relative humidity of 65 percent and temperature of 70° F.

The webbing shall be pulled back and forth through the buckle or manual adjusting device as shown schematically in Figure 9. The anchor end of the webbing (A) shall be attached to a weight (B) of 3 pounds. The webbing shall pass through the buckle (C), and the other end (D) shall be attached to a reciprocating device so that the webbing forms an angle of 8° with the hinge stop (E). The reciprocating device shall be operated for 2,500 cycles at a rate of 18 cycles per minute with a stroke length of inches. The abraded webbing shall be tested for breaking strength by the procedure described in paragraph S5.1(b).

VII. The following new Figure 9 is added at the end of the standard.

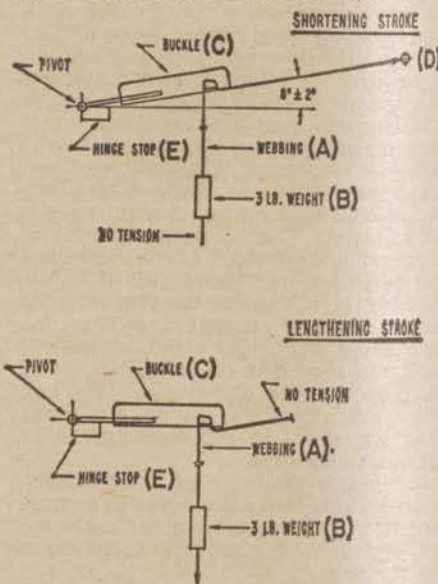


FIGURE 9

[FR Doc. 71-3257 Filed 3-9-71; 8:45 am]

Title 50—WILDLIFE AND FISHERIES

Chapter I—Bureau of Sport Fisheries and Wildlife, Fish and Wildlife Service, Department of the Interior

PART 33—SPORT FISHING

Muscatatuck National Wildlife Refuge, Ind.

The following special regulation is issued and is effective on date of publication in the FEDERAL REGISTER (3-10-71).

§ 33.5 Special regulations: sport fishing; for individual wildlife refuge areas.

INDIANA

MASCATATUCK NATIONAL WILDLIFE REFUGE

Sport fishing on the Muscatatuck National Wildlife Refuge, Seymour, Ind., is permitted only on the areas designated by signs as open to fishing. These open areas comprising 160 acres are delineated on maps available at the refuge headquarters and from the office of the Regional Director, Bureau of Sport Fisheries and Wildlife, Federal Building,

Fort Snelling, Minneapolis, MN 55111. Sport fishing shall be in accordance with all applicable State regulations subject to the following special conditions:

(1) The open season for sport fishing on the refuge shall extend from April 15, 1971, to October 1, 1971, daylight hours only.

(2) Winter fishing through the ice will be permitted on designated areas when it has been determined to be safe and announced by the Refuge Manager.

(3) The use of boats is prohibited. The provisions of these special regulations supplement the regulations which govern fishing on wildlife refuge areas generally which are set forth in Title 50, Part 33, and are effective through October 1, 1971.

CHARLES E. SCHEFFE,
Refuge Manager, Muscatatuck
National Wildlife Refuge, Sey-
mour, Ind.

FEBRUARY 22, 1971.

[FR Doc.71-3299 Filed 3-9-71;8:46 am]

Chapter II—National Marine Fish- eries Service, National Oceanic and Atmospheric Administration, De- partment of Commerce

PART 260—INSPECTION AND CERTIFICATION

Changes in Approved Identification

MARCH 2, 1971.

In the interest of time, this amend-
ment revises only those provisions relat-
ing to approved identification contained
in Part 260—Inspection and Certifica-
tion, of Subchapter G—Processed Fish-
ery Products, Processed Products
Thereof, and Certain Other Processed
Food Products.

This revision is necessary in order to
reflect the transfer of fishery standards
development and inspection functions,
performed under the authority of title II
of the Agricultural Marketing Act of
1946, as amended (7 U.S.C. 1621-1627),
from the Department of the Interior to
the Department of Commerce. This
transfer was effected by Reorganization
Plan No. 4 of 1970 (35 F.R. 15627), which,
among other things, abolished the Bu-
reau of Commercial Fisheries in the De-
partment of the Interior, and transferred
its functions, including the fishery in-
spection function dealt with in these
regulations, to the Department of
Commerce.

Further revisions of other provisions
of these regulations will be forthcoming
shortly, reflecting the transfer of func-
tions outlined above. However, in recog-
nition of the necessity to provide effec-
tive and uninterrupted services to the
fish processing industry and to the pub-
lic, it was determined to proceed im-
mediately with the revision of the
approved identification provision. For
these reasons and in light of the fact that
the changes are technical in nature, no-
tice and public procedure thereon are im-
practicable, unnecessary, and would be
contrary to the public interest.

The amendments are as follows: Sec-
tion 260.86 is hereby revised (including a
new paragraph (f)) to read as follows:

§ 260.86 Approved identification.

(a) Grade marks: The approved grade
mark or identification may be used on
containers, labels, or otherwise indicated
for any processed product that (1) has
been packed under inspection as pro-
vided in this part to assure compliance
with the requirements for wholesomeness
established for the raw product and of
sanitation established for the
preparation and processing operations,
and (2) has been certified by an inspector
as meeting the requirements of such
grade, quality or classification. The grade
marks approved for use shall be similar
in form and design to the examples of
Figures 1 to 5 of this section.

Shield using red, white, and blue back-
ground or other colors appropriate for
label.

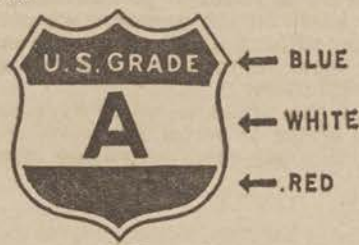


FIGURE 1.

Shield with plain background.



FIGURE 2.

U.S. GRADE A

FIGURE 3.

U.S.
GRADE

B

FIGURE 4.

U.S.
GRADE

C

FIGURE 5.

(b) Inspection marks: The approved
inspection marks may be used on con-
tainers, labels, or otherwise indicated for
any processed product that (1) has been
packed under inspection as provided in
this part to assure compliance with the
requirements for wholesomeness estab-
lished for the raw product and of sani-
tation established for the preparation
and processing operations, and (2) has
been certified by an inspector as meeting
the requirements of such quality or grade
classification as may be approved by the
Secretary. The inspection marks ap-
proved for use shall be similar in form
and design to the examples in Figures 6,
7, and 8 of this section.

Statement enclosed within a circle.



FIGURE 6.

Statement without the use of the circle.

PACKED UNDER
FEDERAL
INSPECTION

U.S. DEPARTMENT
OF COMMERCE

FIGURE 7.

Statement without the use of the circle.

PACKED BY

UNDER FEDERAL INSPECTION
U.S. DEPT. OF COMMERCE

FIGURE 8.

(c) Combined grade and inspection
marks: The grade marks set forth in
paragraph (a) of this section, and the
inspection marks, Figures 7 and 8, set
forth in paragraph (b) of this section,
may be combined into a consolidated
grade and inspection mark for use on
processed products that have been
packed under inspection as provided in
this part.

(d) Products not eligible for approved
identification: Processed products which
have not been packed under inspection
as provided in this part shall not be iden-
tified by approved grade or inspection