

amendments are great and we anticipate no significant impact on small businesses. We seek comment on these tentative conclusions.

*F. Federal Rules that may Duplicate, Overlap, or Conflict with the Proposed Rules*

11. None.

**Filing Instructions**

12. Comments on the IRFA may be filed using the Commission's Electronic Comment Filing System (ECFS) or by filing paper copies. See Electronic Filing of Documents in Rulemaking Proceedings, 63 FR 24121 (May 1, 1998). Comments filed through ECFS may be sent as an electronic file via the Internet to <http://www.fcc.gov/e-file/ecfs.html>. When completing the transmittal screen, commenters should include their full name, Postal Service mailing address, and the applicable docket or rulemaking number. Parties may also submit an electronic comment by Internet e-mail. To receive filing instructions for e-mail comments, commenters should send an e-mail to [ecfs@fcc.gov](mailto:ecfs@fcc.gov), and should include the following words in the body of the message, "get form <your e-mail address>." A sample form and directions will be sent in reply.

13. Parties who choose to file by paper must file an original and four copies of each filing. If parties want each Commissioner to receive a personal copy of their comments, an original plus nine copies must be filed. All filings must be sent to the Commission's Secretary, Magalie Roman Salas, Office of the Secretary, Federal Communications Commission, 445 12th Street, SW, Room TW-A325, Washington, D.C. 20554. A courtesy copy should be delivered to David Hu, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, 445 12th Street, SW, Room 4-B511, Washington, D.C. 20554. Parties should reference WT Docket No. 97-82 in their comments. Parties who choose to file by paper should also submit their comments on diskette. Such a submission should be on a 3.5-inch diskette formatted in an IBM compatible format using Microsoft Word for Windows or compatible software. Diskettes should be submitted to: David Hu, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, 445 12th Street, SW, Room 4-B511, Washington, DC 20554. The diskette should be accompanied by a cover letter and should be submitted in "read only" mode. The diskette should be clearly labeled with the commenter's

name, proceeding (including the docket number in this case—WT Docket No. 97-82), type of pleading (comment or reply comment), date of submission, and the name of the electronic file on the diskette. The label should also include the following phrase: "Disk Copy—Not an Original." Each diskette should contain only one party's pleadings, preferably in a single electronic file. In addition, commenters must send diskette copies to the Commission's copy contractor, International Transcription Service, Inc., 1231 20th Street, NW, Washington, DC 20036.

Federal Communications Commission.

**Magalie Roman Salas,**

*Secretary.*

[FR Doc. 00-20240 Filed 8-8-00; 8:45 am]

**BILLING CODE 6712-01-P**

**DEPARTMENT OF TRANSPORTATION**

**Federal Motor Carrier Safety Administration**

**49 CFR Part 393**

[Docket No. FMCSA-99-6266]

**RIN 2126-AA46**

**Brake Performance Requirements for Commercial Motor Vehicles Inspected by Performance-Based Brake Testers**

**AGENCY:** Federal Motor Carrier Safety Administration (FMCSA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM); request for comments.

**SUMMARY:** The FMCSA is proposing to amend the Federal Motor Carrier Safety Regulations (FMCSRs) to establish pass/fail criteria for use with performance based brake testers (PBBTs), which measure the braking performance of commercial motor vehicles (CMVs). A PBBT is a device that can assess vehicle braking capability through quantitative measure of individual wheel brake forces or overall vehicle brake performance in a controlled test. The specific types of PBBTs addressed in this notice are the roller dynamometer, breakaway torque tester, and flat-plate tester. Only those PBBTs which meet certain functional specifications developed by FMCSA, and published elsewhere in today's **Federal Register**, could be used to enforce the FMCSRs. The proposal would allow State and local enforcement officials to issue citations based on PBBT braking force measurements.

**DATES:** Comments must be received on or before October 10, 2000.

**ADDRESSES:** Submit written, signed comments, referencing the docket number that appears in the heading of this document, to the Docket Clerk, U.S. DOT Dockets, Room PL-401, 400 Seventh Street, SW., Washington, D.C. 20590-0001. All comments received will be available for examination at the above address from 9 a.m. to 5 p.m., e.t., Monday through Friday, except Federal holidays. Those persons desiring notification of receipt of comments must include a self-addressed, stamped envelope or postcard.

**FOR FURTHER INFORMATION CONTACT:** Mr. Gary R. Woodford, Office of Bus and Truck Standards and Operations, FMCSA, (202) 366-4009, or Charles Medalen, Office of the Chief Counsel, HCC-20, (202) 366-1354, Federal Highway Administration, Department of Transportation, 400 Seventh Street, SW., Washington, D.C. 20590. Office hours are from 7:45 a.m. to 4:15 p.m., e.t., Monday through Friday, except Federal holidays.

**SUPPLEMENTARY INFORMATION:**

**Table of Contents**

Electronic Access  
Background  
Field Test Evaluations  
MCSAP Funding Eligibility  
PBBT Basic Principles of Operation  
PBBT Functional Specifications  
Round Robin Tests  
Public Meeting on PBBT Pass/Fail Criteria  
Discussion of Proposal  
Current FMCSR Braking Requirements  
Service Brake System—Proposed Out-of-Compliance Criteria  
Vehicle Applicability  
Braking Stability  
Emergency Brake System  
Parking Brake System  
Test Procedures and Training  
Effective Date  
Rulemaking Analyses and Notices  
Proposed Amendments—Part 393.52

**Electronic Access**

Internet users may access all comments received by the U.S. DOT Dockets, Room PL-401, by using the universal resource locator (URL): <http://dms.dot.gov>. It is available 24 hours each day, 365 days each year. Please follow the instructions online for more information and help.

An electronic copy of this document may be downloaded using a modem and suitable communications software from the Government Printing Office's Electronic Bulletin Board Service at (202) 512-1661. Internet users may reach the Office of the Federal Register's home page at: <http://www.nara.gov/fedreg> and the Government Printing Office's database at: <http://www.access.gpo.gov/nara>.

## Background

Assessment of large truck and bus braking capability in the United States has traditionally been done using visual- and sensory-based inspection methods. These include visual examination of components, measurement of push-rod travel on air braked vehicles, and listening for air brake system leaks. Truck and bus fleets, repair and maintenance facilities, and the enforcement community all generally use this method to look for defective brakes. With regard to roadside inspections conducted by Federal and State officials, guidelines developed by the Commercial Vehicle Safety Alliance (CVSA) are used, under which an unsafe vehicle can be placed out of service (OOS). These guidelines are the North American Uniform Vehicle Out-of-Service Criteria, used by officials in the United States, Canada, and Mexico. While this method has been successful, it does have limitations. These include (1) falsely identifying adequately braked vehicles as unsafe and placing them OOS, (2) brake force-related deficiencies but no visually apparent defects, and (3) the inability to inspect the brake systems on more than a small portion of the commercial vehicle population due to the time involved.

In the early 1990s, the Federal Highway Administration (FHWA)<sup>1</sup> initiated research to evaluate various types of performance-based brake testing technologies for application to commercial motor vehicle inspections. The purpose of the research was to determine, through laboratory investigation, if performance-based brake testers (PBBTs) could be used to evaluate commercial vehicle braking capability. A PBBT is a device that can assess vehicle braking capability through quantitative measure of individual wheel brake forces or overall vehicle brake performance in a controlled test. The PBBTs cannot replace an inspector in finding brake defects unrelated to immediate brake performance, such as air leaks, chafed brake hose, or thin brake pads. However, they can provide an objective and consistent measure of vehicle braking performance, irrespective of brake type, energy supply, or actuation method, and without having to crawl underneath the vehicle as with the current inspection method. The PBBTs

are widely used for brake inspection in Europe and Australia, and are beginning to emerge as both an enforcement tool and diagnostic aid for private sector maintenance and repair shops.

## Field Test Evaluations

After analyzing various PBBT technologies during the above referenced research, the FHWA selected several types for further evaluation in roadside field-test inspections. The types selected were the: (1) Roller dynamometer, (2) flat-plate tester, (3) breakaway torque tester, (4) infrared system, and (5) decelerometer. During the field testing, joint roadside inspections with State officials were conducted on almost 3,000 commercial vehicles. The joint inspections consisted of a CVSA Level 4 inspection<sup>2</sup> and a PBBT test. Ten States and several commercial fleets participated in the program with each evaluating a specific type of PBBT. The ten States which volunteered to participate in the evaluation were Colorado, Connecticut, Indiana, Maryland, Minnesota, Nevada, Ohio, Oregon, West Virginia, and Wisconsin. The roller dynamometer, flat-plate, and breakaway torque testers were evaluated for at least one year by CVSA Certified State Inspectors. The infrared system and decelerometer were also investigated in the field, though less extensively than the three other types of PBBTs. The PBBTs used in this program were first- and second-generation prototype machines to which improvements have since been made by their PBBT manufacturers.

During the field evaluation testing, data were collected from both the CVSA Level 4 inspections and the PBBT measurements. The degree of correlation between the two methods was identified. Data on the operational characteristics of each PBBT were also collected and evaluated, including set-up and tear down times, maintenance requirements, calibration, operator skill level needed, user interface, and vehicle inspection times. These data on operational characteristics were gathered to help in the development of PBBT functional specifications, which are discussed below in more detail.

Agreement on individual weak or defective brakes identified by the CVSA inspection method versus those

identified by a PBBT ranged from 53 to 88 percent, depending on the type of PBBT. This was considered reasonable since the two methodologies assess different brake system characteristics. The PBBTs used in the field tests were not necessarily faster than the brake-only portion of the CVSA inspection, considering time for data entry, driver instruction, and printing of test results. However, the times were generally considered comparable. It was apparent that 30 to 80 five-axle vehicles per eight-hour workday could be screened for further CVSA inspection using one of the PBBT technologies. Accurate screening is important since only approximately 8–12 vehicles per eight-hour workday per inspector can be checked using a CVSA Level 1 inspection.<sup>3</sup>

The overall results of the field test evaluations indicated there were no insurmountable performance or operational limitations with the roller dynamometer, flat-plate, or breakaway torque testers that would prevent them from being used for screening purposes or enforcement. However, the infrared and decelerometer technologies did present some difficulties. In the case of the onboard decelerometer, which measures deceleration rate during a vehicle stop, finding a convenient and large enough space to perform a panic stop with a commercial motor vehicle was at times difficult. Moreover, it is likely that few commercial vehicle drivers would be willing to perform a panic stop in other than an emergency situation because of the potential damage to onboard cargo. Results using the decelerometer were also found to be strongly dependent on driver skill. In the case of the infrared system, applicability of this technology was found to be limited to the detection of inoperative brakes or brakes with push rod stroke measurements in excess of 12.7 mm (0.5 inch) beyond the recommended adjustment limit. Although the decelerometer and infrared system technologies will not be addressed further in this notice, the FMCSA is continuing its research into use of the infrared technology as a possible brake screening device for vehicles.

<sup>3</sup> A Level 1 inspection usually takes approximately 20 to 30 minutes if there are no violations of applicable regulations, and includes both the driver and the vehicle. The inspector reviews the driver's license, medical certificate, record of duty status (or log book) and any readily available supporting documents. The inspection of the vehicle includes an examination of the brake system; coupling devices; exhaust system; frame; fuel system; cargo securement; steering system; suspension system; tires; trailer body; wheels, rims and hub assemblies; and windshield wipers.

<sup>1</sup> On December 9, 1999, the President signed the Motor Carrier Safety Improvement Act of 1999 (Public Law 106-159, 113 Stat. 1748), which established the FMCSA in the Department of Transportation. Prior to that time, the functions that are now carried out by the FMCSA were carried out within the FHWA.

<sup>2</sup> Level 4 inspection is the CVSA designation for a Special Inspection, which typically includes a one time examination of a particular item in support of a study or to verify or refute a suspected trend. In this study the CVSA Level 4 inspection comprised the brake and tire portions of a full Level 1 inspection. Level 1 is the most thorough inspection, including the tires, brake system, driver documents, and a variety of other vehicle safety systems.

A final report describing in greater detail the results of these field test evaluations has been placed in the docket. The report is titled, "Development, Evaluation, and Application of Performance-Based Brake Testing Technologies," February 1999, Report No. FHWA-MC-98-048. Copies of the report may be purchased from the National Technical Information Service (NTIS), Springfield, Virginia 22161, telephone (703) 605-6000. The NTIS accession number for this publication is PB99-134454.

#### MCSAP Funding Eligibility

During the period 1996-98, the FHWA issued four policy memoranda advising that specific PBBTs are eligible for funding under the Motor Carrier Safety Assistance Program (MCSAP). Copies of the memoranda are available in the docket referenced above and are dated April 1, 1996, October 8, 1996, March 13, 1997, and November 3, 1998. The MCSAP is a Federal program, administered by FMCSA, providing funds to States and U.S. territories in support of commercial motor vehicle safety. This means that States or territories may use MCSAP funding to purchase one of the approved PBBTs for use in commercial motor vehicle brake inspections. To date, however, these prototype devices have only been used for screening or sorting purposes, and not enforcement, since PBBT pass/fail criteria have not yet been established within the Federal Motor Carrier Safety Regulations (FMCSRs). Specific pass/fail criteria for PBBTs are being proposed today, under Discussion of Proposal presented below.

The PBBTs which have been approved to date for MCSAP funding are:

- Hunter B400T Flat Plate Tester (in-ground)
- Nepean<sup>4</sup> Mark III Roller Dynamometer (portable)
- Nepean Mark IV Roller Dynamometer (portable)
- Hicklin RBD Roller Dynamometer (portable)
- Radlinski RAI 12200 Roller Dynamometer (in-ground)
- Radlinski RAI 20200 Roller Dynamometer (portable)

The above referenced policy memoranda set forth requirements and suggested procedures for States to follow in using the PBBTs to help in gathering field evaluation data and information relative to the functional specifications of PBBTs. As the memoranda were issued, they reflected

the evolving progress made in the development of functional specifications for PBBTs.

#### PBBT Basic Principles of Operation

The most common and major feature of PBBTs—the roller dynamometer, flat-plate tester, and breakaway torque tester—is that each can measure vehicle braking force<sup>5</sup> so that vehicle total brake force-to-gross vehicle weight ( $BF_{Total}/GVW$ ) can be determined. Gross vehicle weight can be measured separately and the data entered into the PBBT, or, on some, the PBBTs can determine GVW by summing individual axle loads.

In the case of the roller dynamometer the vehicle is driven onto the device so that the wheels on the axle being tested are supported by a pair of powered rollers, fore and aft of the wheels. During the test, the rollers impose rotational motion (up to five mph) to the wheels. As the vehicle brakes are applied and resist the wheel rotation imposed by the powered rollers, the brake force imparted through the tires to the rollers is measured. As the driver applies the brake pedal, braking force increases until the friction between the rollers and tires is exceeded, at which point wheel lockup and tire slippage occur, and the test is terminated. If insufficient brake force is available to achieve wheel lockup, the test is terminated after a fixed period of time. The procedure is repeated for each axle on the vehicle.

With the breakaway torque tester (BTT) the tires are gripped by opposing curved pads. Instead of the PBBT driving the wheels and then having the brakes applied, as with the roller dynamometer, full brake force is first applied. The breakaway torque tester then attempts to rotate the wheels through an instrumented torque arm to determine whether the brakes can resist this force up to a predetermined target value. The test is terminated when the target value is reached, or maximum available brake force is exceeded and the wheel begins to rotate. Because of the gripping action of the breakaway torque tester on opposing sides of the tire, maximum measured brake force is not limited by having simple tire contact friction only, as with the roller dynamometer. The procedure is repeated for each axle on the vehicle.

For the flat-plate tester the vehicle is driven at two to ten mph (depending on tester) onto pairs (left and right) of in-line plates mounted through load cells to a fixed "ground" system. As the

vehicle is driven over the plates, the brakes are applied and force measurements—both braking and wheel load—are obtained as the vehicle comes to a stop. More than one stop may be required depending upon the number of axles involved and the flat plate configuration.

#### PBBT Functional Specifications

On December 8, 1997, the FHWA held a public meeting at the National Highway Traffic Safety Administration (NHTSA) Vehicle Research and Test Center to discuss the development of functional specifications for PBBTs. A notice announcing the meeting was published in the **Federal Register** on November 13, 1997 (62 FR 60817). Data gathered during the PBBT field evaluation tests, referenced above, served as background information for draft functional specifications, which were discussed at the meeting. In addition to the NHTSA and the FHWA, the following companies were represented at the meeting: Battelle, B&B Automotive, B&G Technologies, Inc., Dennis National Lease, Hicklin Engineering, Hunter Engineering Company, Gooch Brake, MGM Brakes, Motion Control Industries, Inc., Nepean Engineering Pty. Ltd., Radlinski & Associates, Inc., and Truckalysar Canada, Inc. Most of the participants were either manufacturers of PBBTs or distributors of such devices.

On June 5, 1998, the FHWA published a **Federal Register** notice (63 FR 30678) requesting public comments on the proposed functional specifications, which incorporated comments received during the public meeting. The agency requested further public comment through this notice to ensure that all interested persons who were unable to attend the meeting would have an opportunity to comment on this subject. The functional specifications are intended to be generic and, therefore, applicable to a range of PBBT technologies. They include requirements for (1) functional performance, such as measurement accuracy with tolerances, calibration, and operator interface, (2) physical characteristics including portability, (3) environmental resistance, (4) operator safety, (5) documentation, including operator and maintenance manuals, and (5) the skill level and number of operator personnel required. The specifications also include quality assurance provisions or methodologies for verifying PBBT compliance with each of the functional specification requirements.

The intent is for the functional specifications to serve as a guideline for

<sup>4</sup>Nepean is now called Vehicle Inspection Systems (VIS).

<sup>5</sup>Braking force is the force that the outer diameter of the tire imparts on the road surface as a result of the brakes being applied.

States in determining whether a particular PBBT would be eligible for funding under MCSAP, and to ensure a certain level of PBBT accuracy and performance. The final functional specifications are published elsewhere in today's **Federal Register**.

### Round Robin Tests

In July 1998, the FHWA conducted a series of round robin tests to assess the suitability of PBBTs for use in enforcement. These were conducted at the National Highway Traffic Safety Administration's Vehicle Research and Test Center. The purpose of the tests was to evaluate the ability of current generation PBBTs to accurately and consistently (1) measure the brake forces and wheel loads of commercial motor vehicles, and (2) then predict the vehicle's deceleration capability from a 32.2 km/hr (20 mph) on-road stop.

The test program involved PBBT tests and 32.2 km/hr (20 mph) stops using two different vehicles, which were tested fully laden and unladen, with weak brakes on selected wheels. The vehicles were (1) a two-axle flatbed straight truck, and (2) a three-axle tractor, two-axle flatbed semi-trailer combination. These were selected for the tests since they were considered representative of a majority of the commercial vehicle axle configurations on the road. There were eight PBBTs used in the testing: five roller dynamometers (two in-ground and three portable), two flat-plate testers, and one breakaway torque tester.

Results indicated that, under most test conditions, the accuracy and repeatability of most of the PBBT results, regardless of the principle of operation, were acceptable for meeting the functional specifications referenced above, and therefore for use in law enforcement. Nearly all of the PBBTs were able to accurately measure the vehicle brake forces. In contrast, several of the PBBTs had difficulty reporting accurate vehicle weights. For the most part, however, this was related to test procedures. Calibration checks of the PBBT weighing mechanisms indicated that all of the PBBTs could meet the functional specifications. In those instances where PBBT accuracy did not achieve acceptable performance, the problems were identified and conveyed to the PBBT manufacturers as recommendations for improvement. Most of the recommendations were consistent with the requirements of the PBBT functional specifications.

Copies of the report, further describing the round robin tests, are available in the docket referenced

above. The report is titled, "PBBT Round-Robin Testing," February 2000.

### Public Meeting on PBBT Pass/Fail Criteria

On October 2, 1998, the FHWA held a public meeting in Rochester, New York, to discuss recommendations for PBBT pass/fail criteria, based upon the field evaluation and round robin tests referenced above. The meeting gave interested persons an opportunity to discuss with FHWA representatives and researchers specific recommendations for vehicle braking force requirements based on PBBT measurements. A notice announcing the meeting was published in the **Federal Register** on August 27, 1998 (63 FR 45792). In addition to FHWA representatives, and those from Battelle Memorial Institute which conducted the research, the following organizations were represented at the meeting: Abex Friction Products, American Trucking Associations, Carlisle Motion Control Industries, Inc., Gooch Brake and Equipment Co., Gunit Corporation, Heavy Duty Brake Manufacturers Council, Hunter Engineering Co., Meritor Heavy Vehicle Systems, Nevada Automotive Test Center, New York State Department of Transportation, Oregon State Department of Transportation, Radlinski & Associates, Inc., Signal Processing Systems, Vehicle Inspection Systems (Sydney, Australia), and Veridian Calspan Operations. For the most part, these consisted of PBBT and brake component manufacturers, vehicle testing laboratories, State departments of transportation, and industry associations.

In addition to specific recommendations for PBBT pass/fail criteria, the meeting addressed other issues including the capabilities of currently available PBBTs, and whether the pass/fail criteria should apply to all vehicles or only those with a GVWR of 4,537 kg (10,001 pounds) or more. All of the meeting comments and recommendations have been taken into consideration by the FMCSA in the development of today's proposal.

### Discussion of Proposal

#### *Current FMCSR Braking Requirements*

Currently, the requirements for commercial motor vehicle (CMV) braking performance are specified in § 393.52. Section 393.52(d) specifies minimum braking force as a percentage of actual gross vehicle weight (GVW), minimum deceleration, and maximum stopping distance requirements for the

service brakes,<sup>6</sup> and maximum stopping distance requirements for the emergency brake system, all from a vehicle speed of 32.2 km/hr (20 mph). For service brake systems all three requirements must be met to achieve compliance with the regulation. Conformity to the stopping distance requirements is determined with the vehicle on a hard surface that is substantially level, dry, smooth, and free of loose material. During the stop, the vehicle must not deviate from a 3.7-meter (12-foot) wide lane. The requirements apply to all CMVs or combinations of CMVs subject to the FMCSRs under any loading condition. Criteria are specified for vehicles having a gross vehicle weight rating (GVWR) greater than 4,536 kilograms (10,000 pounds), as well as those with a GVWR of 4,536 kilograms (10,000 pounds) or less. For example, a passenger-carrying vehicle with GVWR greater than 4,536 kilograms (10,000 pounds), and traveling at 32.2 km/hr (20 mph), must achieve a braking force equal to 43.5 percent of GVW, which produces 4.3 m/sec<sup>2</sup> (14 ft/sec<sup>2</sup>) deceleration, and a 10.7-meter (35-foot) maximum stopping distance. For emergency brake systems on such vehicles, the maximum specified stopping distance is 25.9 m (85 ft). As noted in an earlier **Federal Register** document (37 FR 5250, March 11, 1972), the stopping distances are based on data derived from actual braking tests conducted in 1963.

There is a definite mathematical relationship between the braking forces as percentages of GVW and the corresponding decelerations specified in § 393.52(d). Dividing the deceleration by 9.8 m/sec<sup>2</sup> (32.2 ft/sec<sup>2</sup>), which is the acceleration of gravity, yields the corresponding braking force as a percentage of GVW. In the above example, dividing 4.3 m/sec<sup>2</sup> (14 ft/sec<sup>2</sup>) by 9.8 m/sec<sup>2</sup> (32.2 ft/sec<sup>2</sup>) yields the 43.5 percent braking force as a percentage of GVW. Values for braking force as a percentage of GVW were included in the current regulation because there were some brake testing devices which utilized this measure. The Tapley decelerometer, for example, measured maximum deceleration during an actual vehicle stop, but was calibrated to read equivalent braking force as a percentage of GVW.

As referenced earlier, there are practical difficulties in performing these tests at roadside inspection facilities, because of space limitations and the issue of CMVs with deceleration-

<sup>6</sup>Section 393.5, Definitions, specifies service brake system as a primary brake system used for slowing and stopping a vehicle.

sensitive cargo. Thus, the above performance requirements are rarely enforced by Federal and State officials. Instead, current inspections involve visual, "hands-on" examination of brake system components to identify unsafe vehicles, based on the guidelines developed by the CVSA. While successful and productive, this method does have limitations, such as the number of vehicles that can be inspected on a given day. This factor alone is significant, given that the number of interstate motor carriers listed in the FMCSA Motor Carrier Management Information System (MCMIS) <sup>7</sup> has more than doubled since 1990, and is expected to increase even more. The PBBTs, on the other hand, have the advantage of being able to measure actual vehicle braking performance for enforcement purposes, as well as increase CMV volume in roadside inspections.

*Service Brake System—Proposed Out-of-Compliance Criteria*

In light of the above information, the FMCSA is today proposing alternative brake performance criteria for use with PBBTs in determining CMV service brake system compliance with § 393.52(a)(1) and (a)(2). These specify CMV requirements for minimum braking force as a percentage of GVW and minimum deceleration from 32.2 km/hr (20 mph). The new PBBT criteria would not replace existing requirements, but would serve as an alternative whenever PBBTs are used for determining compliance with § 393.52(a)(1) and (a)(2). Because part 393 does not yet provide for the use of PBBTs, this technology is currently used by State and local officials enforcing the FMCSRs, or compatible State laws or regulations, only for screening purposes. The proposed amendments would enable enforcement officials to issue

citations for inadequate brakes based upon PBBT test results.

The proposed criteria are based on braking force and actual GVW, since all PBBTs which meet these functional specifications must be capable of measuring braking force. Determining compliance based on braking force as a percentage of GVW allows use of the PBBTs. In developing the proposal, the FMCSA considered several options based on all of the research and other information referenced above. The specific performance criteria which the agency is proposing for use with PBBTs, after considering all available information, are the minimum requirements for braking force as a percentage of GVW already specified in the current regulation. These values are presented in table 1, along with the corresponding decelerations and stopping distances, specified in § 393.52(d), as follows:

TABLE 1.—SERVICE BRAKE SYSTEM—PROPOSED OUT-OF-COMPLIANCE CRITERIA

Type of motor vehicle	Braking force as a percentage of gross vehicle or combination weight	Deceleration in feet per second	Application and braking distance in feet from initial speed of 20 mph
A. Passenger-carrying vehicles:			
(1) Vehicles with a seating capacity of 10 persons or less, including driver, and built on a passenger car chassis .....	65.2	21	20
(2) Vehicles with a seating capacity of more than 10 persons, including driver, and built on a passenger car chassis; vehicles built on a truck or bus chassis and having a manufacturer's GVWR of 10,000 pounds or less .....	52.8	17	25
(3) All other passenger-carrying vehicles .....	43.5	14	35
B. Property-carrying vehicles:			
(1) Single unit vehicles having a manufacturer's GVWR of 10,000 pounds or less .....	52.8	17	25
(2) Single unit vehicles having a manufacturer's GVWR of more than 10,000 pounds, except truck tractors. Combinations of a 2-axle towing vehicle and trailer having a GVWR of 3,000 pounds or less. All combinations of 2 or less vehicles in driveaway or towaway operation .....	43.5	14	35
(3) All other property-carrying vehicles and combinations of property-carrying vehicles .....	43.5	14	40

Section 393.52(d) currently specifies 43.4 for the braking force value of vehicle types listed in item B.(3) of table 1. However, in this notice 43.5 is shown and being proposed, since the corresponding deceleration of 14 ft/sec<sup>2</sup> divided by the acceleration of gravity, 32.2 ft/sec<sup>2</sup>, is 43.5 when rounded off.

In addition, the current regulation at § 393.52(a) requires CMVs to meet all three of the specified performance measures shown above. Under today's proposal this would not change. However, enforcement officials and motor carriers could use PBBTs to determine compliance with the minimum requirements for braking

force as a percentage of GVW (BF<sub>Total</sub>/GVW), <sup>8</sup> specified in § 393.52(a)(1); compliance with that requirement would also satisfy the minimum deceleration requirement specified in § 393.52(a)(2). It would be redundant to require the measurement of deceleration along with braking force as a percentage of GVW, because of the simple mathematical relationship that exists between the two parameters (braking force as a percentage of GVW = deceleration/acceleration of gravity). As indicated earlier, braking force as a percentage of GVW was specified along with deceleration in the current regulation, because certain brake

testing devices measured maximum deceleration during an actual vehicle stop, but were calibrated to read in equivalent braking force as a percentage of GVW. This is not the case with the PBBTs being addressed in this notice.

Therefore, those CMVs which achieve a maximum PBBT-measured braking force, as a percentage of GVW, that is equal to or greater than the braking force levels specified above in table 1 would be considered in compliance with both the braking force and deceleration requirements specified in § 393.52(a)(1) and (a)(2), respectively. Those CMVs which do not meet the braking force levels specified in table 1 would be

<sup>7</sup> MCMIS is a central repository of comprehensive motor carrier and safety data maintained by the FMCSA.

<sup>8</sup> BF<sub>Total</sub> represents the sum of the braking forces for the service brakes at each wheel of the vehicle or vehicle combination.

considered in non-compliance with both the braking force and deceleration requirements, thereby enabling enforcement officials to issue citations.

The FMCSA is proposing today the same requirements for PBBT-measured braking force as a percentage of GVW that are in the current regulation, to assure a continuing and adequate level of CMV safety performance on our nation's highways. The agency has no information to indicate that these levels are too low for achieving this purpose, or that they are too high and therefore a burden for motor carriers to achieve. At the same time, however, the agency recognizes that the latest amendments to these requirements were published 28 years ago (37 FR 5250, March 11, 1972; 37 FR 10727, May 27, 1972; and 37 FR 11336, June 7, 1972), and that they are rarely enforced. The FMCSA requests comments on whether these requirements are still appropriate in light of more recent vehicle brake system and testing technologies, or whether they should be increased or decreased and to what level. Persons providing comments are requested to include supporting research and test data or other documentation.

The agency would retain the stopping distance requirements in today's proposal because it believes that a satisfactory PBBT-measured braking force as a percentage of GVW does not necessarily guarantee compliance with the corresponding stopping distance specified in § 393.52(a)(3). The proposed braking forces as percentages of GVW represent the maximum braking forces achieved during actual vehicle stops, and the PBBT functional specifications also require PBBTs to measure maximum braking forces. However, this maximum braking force cannot be used to compute corresponding stopping distance, because maximum braking force may not be sustained over the entire stop. Other factors, such as brake system imbalance, can cause the braking force, and therefore deceleration, to decrease significantly after reaching a maximum. In addition, the distance traveled during brake application and brake force buildup varies with vehicle type, being negligible for many light vehicles and greatest for combinations of commercial vehicles. Thus, a vehicle with some brake system imbalance, for example, or slower than normal brake application time, could comply with the specified braking force but still not achieve the specified stopping distance. For these reasons the FMCSA is retaining the current stopping distance requirements in today's proposal. However, the agency requests comments from PBBT

manufacturers and users. How closely from a safety standpoint do PBBT-measured braking forces correlate to CMV stopping distances during actual stops from 32.2 km/hr (20 mph)? Is the correlation close enough to use PBBTs to satisfy all three current requirements in § 393.52(a), i.e., minimum braking force as a percentage of GVW, minimum deceleration, and maximum stopping distance? Please discuss. Persons providing comments are requested to include supporting rationale and test results or other documentation.

As referenced above, those CMVs which do not meet the PBBT-measured braking forces specified in today's proposal would be considered out-of-compliance with both the braking force and deceleration requirements of § 393.52(a), thereby enabling State and local enforcement officials to issue citations relative to the service brake system.

If today's proposal is adopted, the FMCSA intends to work with the CVSA, and others as appropriate, to develop a list of likely brake system components or causes responsible for low PBBT measurements on CMVs. The agency believes that this guidance would be helpful to motor carriers and enforcement officials in identifying and correcting the inadequate braking conditions. Upon correction, the motor carrier would then certify correction on the roadside inspection report as outlined above. Under this approach, the FMCSA would not require a post-inspection PBBT measurement, as long as the involved motor carrier certifies correction of the deficiency consistent with existing FMCSRs. The agency requests comments on this approach. Should a post-inspection PBBT measurement be required and under what conditions?

#### *Vehicle Applicability*

As shown in table 1 in this preamble, the FMCSA would propose that the above PBBT pass/fail criteria be applicable to all CMVs or CMV combinations subject to the FMCRs. The term CMV is defined by statute (49 U.S.C. 31132) to mean a self-propelled or towed vehicle used on the highways in interstate commerce to transport passengers or property, if the vehicle: (1) Has a GVWR or GVW of at least 10,001 pounds, whichever is greater; (2) is designed or used to transport more than 8 passengers (including the driver) for compensation; (3) is designed or used to transport more than 15 passengers, including the driver, and is not used to transport passengers for compensation; or (4) is used in transporting material found by the

Secretary of Transportation to be hazardous under section 5103 of title 49, and transported in a quantity requiring placarding under regulations prescribed by the Secretary under section 5103. With the exception of vehicles designed or used to transport 9 to 15 passengers (including the driver) for compensation, virtually all of the CMVs covered by the statutory definition are currently subject to part 393 and would, therefore, be covered by this rulemaking. The agency does not intend to subject these smaller passenger vehicles to the braking requirements at this time.

The agency believes it is appropriate to provide PBBT pass/fail criteria for both light CMVs (GVWR or GVW of 4,536 kg (10,000 pounds) or less) and heavy CMVs (GVWR or GVW greater than 4,536 kg (10,000 pounds)). Because PBBTs have the capacity to measure braking force on both light and heavy vehicles, the FMCSA believes that the benefits associated with PBBTs should be made available to a wide range of CMVs. These include the benefit of increased numbers of roadside inspections, and the safety benefit of measuring actual vehicle braking performance. However, the agency requests comments on whether it is appropriate or necessary to provide PBBT pass/fail criteria for light CMVs, since they represent a relatively small proportion of all CMVs and are, therefore, less likely to undergo roadside brake inspections than are heavy CMVs. As an alternative, PBBT pass/fail criteria could be limited to those CMVs with GVWR or GVW greater than 4,536 kg (10,000 pounds). Persons submitting comments are requested to provide supporting data.

#### *Braking Stability*

The FMCSA has tentatively decided not to propose PBBT pass/fail criteria for determining CMV braking stability performance at this time, because the agency has conducted only preliminary research in this area. Further research is planned.

Current requirements for CMV braking stability during a 32.2-km/hr (20-mph) stop are specified in § 393.52(c). The vehicle must be in the center of a 3.7-meter (12-foot) wide lane when the braking test begins and must not deviate from that lane during the test. The stop must be made with the vehicle on a hard surface that is substantially level, dry, smooth, and free of loose material.

The FMCSA believes that PBBTs could be used to determine CMV braking stability by comparing PBBT

measured braking forces (BF/WL)<sup>9</sup> from one side of the vehicle to the other for a given axle. Side-to-side brake force imbalance of sufficient magnitude can cause vehicle yaw<sup>10</sup> or lane deviation while braking. This could result from worn brake linings or misadjusted brakes on one side of the vehicle. By comparing PBBT measured braking forces (BF/WL) on a given axle, braking stability performance could be assessed. When the difference between braking forces (BF/WL) on a given axle exceeded a certain value, vehicles could be determined to be out of compliance or placed out of service, depending on the criteria.

There are other factors which can also contribute to vehicle lane deviation while braking, including low or inconsistent areas of road surface friction, uneven CMV load distribution, and driver skill. Apart from these other factors, the agency's planned research would seek to quantify the maximum allowable difference in braking forces (BF/WL) for a particular axle, necessary to stay within a 3.7-meter (12-foot) lane during a 32.2 km/hr (20 mph) stop. Depending on the results of this research, the FMCSA may propose pass/fail criteria for use with PBBTs in determining CMV braking stability performance. The agency requests comments on the feasibility of this approach. Since steering capability is critical during any yaw motion of the vehicle, should the PBBT pass/fail criteria be confined to steering axles only? The agency is particularly interested in receiving comments from those who have conducted research or testing in this area. Persons submitting comments are requested to provide supporting documentation.

#### Emergency Brake System

Section 393.5 of the FMCSRs defines emergency brake system as "[a] mechanism designed to stop a vehicle after a single failure occurs in the service brake system of a part designed to contain compressed air or brake fluid or vacuum (except failure of a common valve, manifold brake fluid housing, or brake chamber housing)." Thus, if there is leakage of the medium which actuates the brakes, *i.e.*, air, fluid, or vacuum, the emergency brake system feature is designed to ensure that the vehicle can still be stopped, albeit in a longer distance. CMVs manufactured on or after July 1, 1973, must have an emergency brake system that conforms

<sup>9</sup> BF represents braking force for one wheel, and WL represents vehicle load at that wheel (wheel load).

<sup>10</sup> Yaw motion is vehicle rotation about its vertical axis.

to the stopping distance requirements specified in § 393.52(b). For example, a passenger-carrying vehicle with GVWR greater than 4,536 kilograms (10,000 pounds), and traveling at 32.2 km/hr (20 mph), has an emergency brake system stopping distance requirement of 25.9 meters (85 feet). For full functioning of the service brakes without such failure, the stopping distance requirement is 10.7 meters (35 feet).

The FMCSA has tentatively decided not to propose PBBT pass/fail criteria for emergency brake system performance at this time. The agency tentatively believes that it would not be practical to have such requirements for enforcement purposes at roadside inspection facilities. This is because a brake system leak, *i.e.*, compressed air, brake fluid, or vacuum, would first have to be created to simulate a single failure in the service brake system. The FMCSA believes that this is not an appropriate or practical approach for the use of PBBTs during roadside inspection, because of the time involved and necessary modifications to an otherwise normally functioning brake system. However, the agency requests comments on whether it should explore ways to test emergency brake system performance in conjunction with PBBTs.

#### Parking Brake System

Similarly, the agency has tentatively decided not to propose PBBT pass/fail criteria for determining CMV parking brake system<sup>11</sup> performance at this time. The FMCSA believes that more research is needed before proposing specific criteria. The PBBT parking brake measurements which were obtained during the field evaluation tests referenced above could not be correlated to parking brake results from CVSA inspections.

Section 393.41, Parking brake system, requires that CMVs manufactured on and after March 7, 1990,<sup>12</sup> be equipped with a parking brake system that can hold the vehicle or combination, under any loading condition, as required by Federal Motor Vehicle Safety Standard (FMVSS) No. 121, Air Brake Systems. FMVSS No. 121 includes requirements for each vehicle to meet a static drawbar pull test, or grade holding test, at the option of the new vehicle manufacturer. Generally, the drawbar pull test requires that the static retardation force, produced by application of the parking

<sup>11</sup> Section 393.5, defines parking brake system as "A brake system used to hold a vehicle stationary."

<sup>12</sup> Exceptions are an agricultural commodity trailer, converter dolly, heavy hauler, or pulpwood trailer, which must instead carry chocking blocks to prevent movement when parked.

brake, meet minimum levels depending on vehicle type. For truck tractors with more than two axles, this force when divided by GVWR (static retardation force/GVWR), must be not less than 0.14. For other vehicles, this force when divided by GAWR<sup>13</sup> (static retardation force/GAWR), must be not less than 0.28 for any axle (other than a steerable front axle). In the case of the grade holding test, the vehicle must remain stationary on a 20 percent grade with all parking brakes applied. For either option, the vehicles must meet the requirements when loaded to GVWR, and at unloaded weight plus 226.8 kg (500 pounds).

Although the FMCSA has tentatively decided not to propose parking brake system PBBT criteria at this time, the agency is considering one approach which it may propose in the future. This approach is tied to the 20 percent grade holding test discussed above. Under this approach, the FMCSA would require a PBBT measured braking force ( $PBF_{Total}/GVW$ )<sup>14</sup> for the parking system at least equal to that which is necessary for the vehicle to remain stationary on a 20 percent grade. It can be shown through analytic calculation<sup>15</sup> that this braking force would be 0.196 ( $PBF_{Total}/GVW = 0.196$ ). Therefore, using this criterion for parking brake systems, those CMVs which could not achieve a PBBT measured braking force ( $PBF_{Total}/GVW$ ) equal to or higher than 0.196 would be found out of compliance with the FMCSR, or placed out of service, depending on the criteria. By contrast, current CVSA guidelines, "2000 North American Uniform Out of Service Criteria," require only that the parking brake function properly upon actuation, and that there be no "non-manufactured" holes or cracks in the spring brake housing. The FMCSA would like to obtain comments from interested persons on the new approach being considered, and on whether the agency should propose PBBT pass/fail criteria for determining CMV parking brake performance.

Additionally, the agency is interested in obtaining comments on the level of braking force ( $PBF_{Total}/GVW = 0.196$ ) discussed above. As indicated, this level would be equivalent to the 20 percent grade holding requirement, which is now specified for new air braked vehicles in FMVSS No. 121 and CMVs by reference in § 393.41, Parking brake system. Given the wear which vehicle

<sup>13</sup> Gross Axle Weight Rating.

<sup>14</sup>  $PBF_{Total}$  represents the sum of the braking forces for the parking brakes at each wheel of the vehicle or vehicle combination.

<sup>15</sup> The calculations and methodology for determining this are contained in the docket referenced above.

components and linkages experience through normal usage, should the same requirement that is specified for new vehicle parking brake systems also be specified for CMVs in use? Could CMVs in use meet this requirement? In contrast to the 20 percent grade, or  $PBF_{Total}/GVW = 0.196$ , discussed above, comparable requirements for the parking brake systems of new heavy vehicles in Europe<sup>16</sup> are an 18 percent grade for single unit CMVs and a 12 percent grade for CMV combinations. The FMCSA is particularly interested in receiving comments from users and manufacturers of CMVs. Persons submitting comments are requested to provide supporting documentation.

### Test Procedures and Training

As part of this proposal, the FMCSA is interested in receiving comments which address two other areas involving PBBTs.

The first is development of standardized test procedures for each type of PBBT: roller dynamometer, breakaway torque tester, and flat plate tester. The procedures may also vary depending on the vehicle configuration being tested. The FMCSA believes that a uniform set of test procedures is needed to help assure consistent test results for a given vehicle from one PBBT to another. The goal would be to minimize or eliminate any influence that a particular PBBT operator or procedure might have on the test results. The agency anticipates working with PBBT manufacturers in the development of these procedures, so that they can be used by State and local enforcement officials and help assure uniform PBBT test results. The FMCSA requests comments on whether there are entities other than PBBT manufacturers which it should work with in developing standardized test procedures, and what issues should be addressed.

The second area involves PBBT operator training. Again, the agency believes this is necessary to help assure consistent and valid test results for enforcement purposes. The FMCSA anticipates working with CVSA and PBBT manufacturers in developing this training. Issues to be addressed include principles of PBBT operation, interpretation of test results, test duration, and test approach for different vehicle configurations. After the training is developed, the FMCSA anticipates that each State would take

responsibility for training its enforcement officials through use of these training materials. The FMCSA requests comments on whether there are entities other than CVSA and PBBT manufacturers, which it should work with in developing PBBT training for enforcement officials. The agency is especially interested in receiving comments from PBBT manufacturers and users concerning the various training issues that need to be addressed, and from State enforcement officials concerning the issue of training responsibility.

### Effective Date

The FMCSA would make the proposed regulatory changes effective 30 days after issuance of a final rule. Since the use of PBBTs would be an option under this proposal, and not a requirement, the agency believes that a longer period of time is not warranted. Further, having the proposed requirements become effective soon after publication of a final rule would permit those States which have PBBTs to begin using them for enforcement purposes. The FMCSA also believes that having the proposed requirements in place would serve as an incentive for other States and localities to acquire this new technology and realize its benefits. However, the agency requests comments on whether a longer time period is warranted, and if so, what it should be. Commenters are requested to provide supporting rationale.

### Rulemaking Analyses and Notices

All comments, received before the close of business on the comment closing date indicated above will be considered and will be available for examination in the docket room at the above address, using the docket number appearing at the top of this document. Comments received after the comment closing date will be filed in the docket and will be considered to the extent practicable. The agency may, however, issue a final rule at any time after the close of the comment period. In addition to late comments, the FMCSA will also continue to file, in the docket, relevant information as it becomes available after the comment period closing date, and interested persons should continue to examine the public docket for new material.

### Executive Order 12866 (Regulatory Planning and Review) and DOT Regulatory Policies and Procedures

The FMCSA has determined that this action is not a significant regulatory action within the meaning of Executive Order 12866 or significant within the

meaning of Department of Transportation regulatory policies and procedures. This proposal, if adopted, would establish PBBT pass/fail criteria for use in determining the braking performance of CMVs. State and local enforcement officials could issue vehicle citations based on PBBT test results. Without these enforcement criteria, PBBTs would continue to be used only for screening of CMVs at roadside inspection facilities. PBBTs enable inspectors to screen large numbers of CMVs for brake performance deficiencies. States and localities which choose to use PBBTs for enforcement purposes would have to purchase the devices. This action would not mandate such expenditures, however, since the proposal does not eliminate the current "hands-on" method for determining compliance with the braking regulations. Further, the FMCSA anticipates that MCSAP funding will continue to be available to States for purchasing PBBTs.

### Regulatory Flexibility Act

In compliance with the Regulatory Flexibility Act (5 U.S.C. 601–612), we have evaluated the effects of this rule on small entities. The proposal, if adopted, would establish PBBT pass/fail criteria for use in determining the braking performance of CMVs. However, the proposal would not impose any new requirements beyond those of the existing rule, 49 CFR 393.52. It would simply allow States and motor carriers to use PBBTs to determine compliance with certain provisions of 49 CFR 393.52. Actual performance criteria remain the same. State and local enforcement officials could issue vehicle citations based on PBBT test results. PBBTs enable inspectors to screen large numbers of CMVs for brake performance deficiencies. States and localities which choose to use PBBTs as an optional method for enforcement of the braking regulations would have to purchase the devices. The FMCSA anticipates that MCSAP funding will continue to be available to States which desire to purchase PBBTs. In addition, the agency believes that States will realize increased safety benefits from PBBTs, through increased numbers of roadside inspections and measurement of actual vehicle braking performance. Accordingly, the FMCSA certifies that this action would not have a significant economic impact on a substantial number of small entities.

### Executive Order 13132 (Federalism)

This action has been analyzed in accordance with the principles and criteria contained in Executive Order

<sup>16</sup>Economic Commission for Europe, ECE Regulation No. 13, "Uniform Provisions Concerning the Approval of Vehicles of Categories M, N and O with Regard to Braking," October 1996.

13132, dated August 4, 1999, and it has been determined that this proposed rule would not have a substantial direct effect on, or sufficient federalism implications for, States. The proposed rule would not limit the policymaking discretion of States, nor would it preempt any State law or regulation. States that choose to use PBBTs would have to buy them, but such equipment would be an eligible expense under MCSAP.

**Executive Order 12372 (Intergovernmental Review)**

Catalog of Federal Domestic Assistance Program Number 20.217, Motor Carrier Safety. The regulations implementing Executive Order 12372 regarding intergovernmental consultation on Federal programs and activities do not apply to this program.

**Unfunded Mandates Reform Act of 1995**

This rule does not impose an unfunded Federal mandate, as defined by the Unfunded Mandates Reform Act of 1995 (2 U.S.C. 1532 *et seq.*), that will result in the expenditure by State, local, and tribal governments, in the aggregate, or by the private sector, of \$100 million or more in any one year.

**Paperwork Reduction Act**

The FMCSA has determined that this proposal is exempt from the requirements of the Paperwork Reduction Act of 1995 [44 U.S.C. 3501 *et seq.*]. There is a certification requirement that is imposed on six PBBT manufacturers, as discussed in the final functional specifications notice published elsewhere in today's **Federal Register**. However, OMB clearance is not required because there are less than 10 public entities affected by this certification requirement. See 5 CFR 1320.(3)(c). In addition, there is no new paperwork requirement on the part of the States, because they would only be required to complete the same paperwork they currently prepare, when

requesting funds for the purchase of PBBTs from the FMCSA. Accordingly, the agency has determined that the certification requirement does not constitute a "collection of information" covered by the PRA.

**National Environmental Policy Act**

The agency has analyzed this rulemaking for the purposes of the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 *et seq.*) and has determined that this action would not have any effect on the quality of the environment.

**Executive Order 12988 (Civil Justice Reform)**

This action meets applicable standards in sections 3(a) and 3(b)(2) of Executive Order 12988, Civil Justice Reform, to minimize litigation, eliminate ambiguity, and reduce burden.

**Executive Order 13045 (Protection of Children)**

We have analyzed this action under Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks. This rule is not an economically significant rule and does not concern an environmental risk to health or safety that may disproportionately affect children.

**Executive Order 12630 (Taking of Private Property)**

This rule will not effect a taking of private property or otherwise have taking implications under Executive Order 12630, Governmental Actions and Interference with Constitutionally Protected Property Rights.

**Regulation Identification Number**

A regulation identification number (RIN) is assigned to each regulatory action listed in the Unified Agenda of Federal Regulations. The Regulatory Information Service Center publishes the Unified Agenda in April and October of each year. The RIN contained

in the heading of this document can be used to cross-reference this action with the Unified Agenda.

**List of Subjects in 49 CFR Part 393**

Motor carriers, Motor vehicle equipment.

Issued on: July 24, 2000.

**Clyde J. Hart, Jr.**,  
*Acting Deputy Administrator.*

In consideration of the foregoing, the FMCSA proposes to amend title 49, Code of Federal Regulations, chapter III, as follows:

**PART 393—[AMENDED]**

1. Revise the authority citation for part 393 to read as follows:

**Authority:** 49 U.S.C. 322, 31136, and 31502; Section 1041(b) of Pub. L. 102-240, 105 Stat. 1914, 1993 (1991); and 49 CFR 1.73.

2. Amend § 393.52 by revising paragraph (a)(3), by adding paragraph (a)(4), and by revising paragraph (d) to read as follows:

**§ 393.52 Brake performance.**

- (a) \* \* \*
- (3) Stopping from 20 miles per hour in a distance, measured from the point at which movement of the service brake pedal or control begins, that is not greater than the distance specified in the table in paragraph (d) of this section; or
- (4) Developing only the braking force specified in paragraph (a)(1) of this section and the stopping distance specified in paragraph (a)(3) of this section, if braking force is measured by a performance-based brake tester which meets the requirements of functional specifications for performance-based brake testers for commercial motor vehicles, where braking force is the sum of the braking forces at each wheel of the vehicle or vehicle combination as a percentage of gross vehicle or combination weight.

\* \* \* \* \*

(d) Vehicle brake performance table:

Type of motor vehicle	Service Brake Systems			Emergency brake systems: application and braking distance in feet from initial speed of 20 mph
	Braking force as a percentage of gross vehicle or combination weight	Deceleration in feet per second per second	Application and braking distance in feet from initial speed of 20 mph	
A. Passenger-carrying vehicles:				
(1) Vehicles with a seating capacity of 10 persons or less, including driver, and built on a passenger car chassis .....	65.2	21	20	54
(2) Vehicles with a seating capacity of more than 10 persons, including driver, and built on a passenger car chassis; vehicles built on a truck or bus chassis and having a manufacturer's GVWR of 10,000 pounds or less .....	52.8	17	25	66
(3) All other passenger-carrying vehicles .....	43.5	14	35	85

Type of motor vehicle	Service Brake Systems			Emergency brake systems: application and braking distance in feet from initial speed of 20 mph
	Braking force as a percentage of gross vehicle or combination weight	Deceleration in feet per second per second	Application and braking distance in feet from initial speed of 20 mph	
B. Property-carrying vehicles:				
(1) Single unit vehicles having a manufacturer's GVWR of 10,000 pounds or less .....	52.8	17	25	66
(2) Single unit vehicles having a manufacturer's GVWR of more than 10,000 pounds, except truck tractors. Combinations of a 2-axle towing vehicle and trailer having a GVWR of 3,000 pounds or less. All combinations of 2 or less vehicles in driveaway or towaway operation	43.5	14	35	85
(3) All other property-carrying vehicles and combinations of property-carrying vehicles .....	43.5	14	40	90

**Note:** (a) There is a definite mathematical relationship between the figures in columns 2 and 3. If the decelerations set forth in column 3 are divided by 32.2 feet per second per second, the figures in column 2 will be obtained. (For example, 21 divided by 32.2 equals 65.2 percent.) Column 2 is included in the tabulation because certain brake testing devices utilize this factor.

(b) The decelerations specified in column 3 are an indication of the effectiveness of the basic brakes, and as measured in practical brake testing are the maximum decelerations attained at some time during the stop. These decelerations as measured in brake tests cannot be used to compute the values in column 4 because the deceleration is not sustained at the same rate over the entire period of the stop. The deceleration increases from zero to a maximum during a period of brake system application and brake-force buildup. Also, other factors may cause the deceleration to decrease after reaching a maximum. The added distance which results because maximum deceleration is not sustained is included in the figures in column 4 but is not indicated by the usual brake-testing devices for checking deceleration.

(c) The distances in column 4 and the decelerations in column 3 are not directly related. "Brake-system application and braking distance in feet" (column 4) is a definite measure of the overall effectiveness of the braking system, being the distance traveled between the point at which the driver starts to move the braking controls and the point at which the vehicle comes to rest. It includes distance traveled while the brakes are being applied and distance traveled while the brakes are retarding the vehicle.

(d) The distance traveled during the period of brake-system application and brake-force buildup varies with vehicle type, being negligible for many passenger cars and greatest for combinations of commercial vehicles. This fact accounts for the variation from 20 to 40 feet in the values in column 4 for the various classes of vehicles.

(e) The terms "GVWR" and "GVW" refer to the manufacturer's gross vehicle weight rating and the actual gross vehicle weight, respectively.

[FR Doc. 00-19917 Filed 8-8-00; 8:45 am]

BILLING CODE 4910-22-P

## DEPARTMENT OF COMMERCE

### National Oceanic and Atmospheric Administration

#### 50 CFR Part 216

[Docket No. 000720213-0213-01; I.D. 062000C]

RIN 0648-AO40

#### Marine Mammals; Subsistence Taking of Northern Fur Seals; Harvest Estimates

**AGENCY:** National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

**ACTION:** Proposed estimates of annual fur seal subsistence needs; request for comments.

**SUMMARY:** Pursuant to the regulations governing the subsistence taking of northern fur seals, this action proposes annual estimates of fur seal subsistence needs for 2000 through 2002 on the Pribilof Islands, Alaska, and summarizes the annual fur seal subsistence harvests on St. George and St. Paul Islands (the Pribilof Islands) for 1997 through 1999. NMFS solicits

public comments on the proposed estimates.

**DATES:** Written comments must be received at the appropriate address or fax number (See **ADDRESSES**) no later than 5 p.m., eastern daylight time, on September 8, 2000.

**ADDRESSES:** Comments or requests for a copy of the draft Environmental Assessment should be addressed to the Chief, Marine Mammal Division, Office of Protected Resources, 1315 East-West Highway, Silver Spring, MD 20910. Comments also may be sent via facsimile (fax) to (301) 713-4060. Comments will not be accepted if submitted via email or Internet.

**FOR FURTHER INFORMATION CONTACT:**

Dave Cormany, (907) 271-3024, fax (907) 271-3030, email [Dave.Cormany@noaa.gov](mailto:Dave.Cormany@noaa.gov); Michael Payne, (907) 586-7235, fax (907) 586-7012, email [Michael.Payne@noaa.gov](mailto:Michael.Payne@noaa.gov); or Thomas Eagle, (301) 713-2322, ext. 105, fax (301) 713-4060, email [Tom.Eagle@noaa.gov](mailto:Tom.Eagle@noaa.gov).

**SUPPLEMENTARY INFORMATION:** The subsistence harvest from the depleted stock of northern fur seals, *Callorhinus ursinus*, on the Pribilof Islands, Alaska, is governed by regulations found in 50 CFR part 216, subpart F. The purpose of these regulations, published under the authority of the Fur Seal Act (FSA), 16 U.S.C. 1151, *et seq.*, and the Marine

Mammal Protection Act (MMPA), 16 U.S.C. 1361, *et seq.*, is to limit the take of fur seals to a level providing for the subsistence needs of the Pribilof residents, while restricting taking by sex, age, and season for herd management purposes. To further minimize negative effects on the Pribilof Islands' fur seal population, the harvest has been limited to a 47-day season (June 23—August 8).

Pursuant to the regulations governing the taking of fur seals for subsistence purposes, NMFS must publish a summary of the fur seal harvest for the previous 3-year period and an estimate of the number of seals expected to be taken in the subsequent 3-year period to meet the subsistence needs of the Aleut residents of the Pribilof Islands.

#### Summary of Harvest Operations and Monitoring 1997-1999

The annual harvests were conducted in the established manner and employed the standard methods required under regulations at 50 CFR 216.72. NMFS personnel monitored each daily harvest and worked closely with the tribal governments of each island to further improve the efficiency of the annual harvest and full utilization of the animals taken. NMFS personnel also monitored the disposal of by-products of the subsistence harvest in an effort to ensure that certain parts, such as bacula, of harvested seals were