

of the Commission's Rules, 46 FR 11549, published February 9, 1981.

9. For further information concerning this proceeding, contact Montrose Tyree, Broadcast Bureau, (202) 632-7792. However, members of the public should note that from the time a Notice of Proposed Rule Making is issued until the matter is no longer subject to Commission consideration or court review, all *ex parte* contacts are prohibited in Commission proceedings, such as this one, which involve channel assignments. An *ex parte* contact is a message (spoken or written) concerning the merits of a pending rule making other than comments officially filed at the Commission or oral presentation required by the Commission.

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

Federal Communications Commission.

Martin Blumenthal,

Acting Chief, Policy and Rules Division, Broadcast Bureau.

Appendix

1. Pursuant to authority found in sections 4(i), 5(d)(1), 303 (g) and (r), and 307(b) of the Communications Act of 1934, as amended, and § 0.281(b)(6) of the Commission's Rules, IT IS PROPOSED TO AMEND the FM Table of Assignments, § 73.202(b) of the Commission's Rules and Regulations, as set forth in the *Notice of Proposed Rule Making* to which this Appendix is attached.

2. *Showings Required.* Comments are invited on the proposal(s) discussed in the *Notice of Proposed Rule Making* to which this Appendix is attached. Proponent(s) will be expected to answer whatever questions are presented in initial comments. The proponent of a proposed assignment is also expected to file comments even if it only resubmits or incorporates by reference its former pleadings. It should also restate its present intention to apply for the channel if it is assigned, and, if authorized, to build a station promptly. Failure to file may lead to denial of the request.

3. *Cut-off Procedures.* The following procedures will govern the consideration of filings in this proceeding.

(a) Counterproposals advanced in this proceeding itself will be considered, if advanced in initial comments, so that parties may comment on them in reply comments. They will not be considered if advanced in reply comments. (See § 1.420(d) of the Commission's Rules.)

(b) With respect to petitions for rule making which conflict with the proposal(s) in this *Notice*, they will be

considered as comments in the proceeding, and Public Notice to this effect will be given as long as they are filed before the date for filing initial comments herein. If they are filed later than that, they will not be considered in connection with the decision in this docket.

(c) The filing of a counterproposal may lead the Commission to assign a different channel than was requested for any of the communities involved.

4. *Comments and Reply Comments; Service.* Pursuant to applicable procedures set out in §§ 1.415 and 1.420 of the Commission's Rules and Regulations, interested parties may file comments and reply comments on or before the dates set forth in the *Notice of Proposed Rule Making* to which this Appendix is attached. All submissions by parties to this proceeding or persons acting on behalf of such parties must be made in written comments, reply comments, or other appropriate pleadings. Comments shall be served on the petitioner by the person filing the comments. Reply comments shall be served on the person(s) who filed comments to which the reply is directed. Such comments and reply comments shall be accompanied by a certificate of service. (See § 1.420 (a), (b) and (c) of the Commission's Rules.)

5. *Number of Copies.* In accordance with the provisions of § 1.420 of the Commission's Rules and Regulations, an original and four copies of all comments, reply comments, pleadings, briefs, or other documents shall be furnished the Commission.

6. *Public Inspection of Filings.* All filings made in this proceeding will be available for examination by interested parties during regular business hours in the Commission's Public Reference Room at its headquarters, 1919 M Street, NW., Washington, D.C.

[FR Doc. 82-4304 Filed 2-17-82; 8:45 am]

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DEPARTMENT OF TRANSPORTATION

Federal Railroad Administration

49 CFR Part 213

[Docket No. RST-3, Notice No. 3]

Track Safety Standards; Miscellaneous Proposed Amendments

AGENCY: Federal Railroad Administration (FRA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This notice proposes to amend the Track Safety Standards. The

proposed amendments would revise and clarify existing rules and would eliminate certain rules no longer considered necessary for safety. This action is taken by FRA in an effort to improve its safety regulatory program.

DATES: (1) **Written Comments:** Written comments must be received before March 22, 1982. Comments received after that date will be considered so far as possible without incurring additional expense or delay.

(2) **Public Hearing:** A public hearing will be held at 10:00 a.m. on March 16, 1982. Any person who desires to make an oral statement at the hearing should notify the Docket Clerk before March 10, 1982.

ADDRESSES: **Written Comments:** Written comments should identify the docket number and the notice number and should be submitted in triplicate to: Docket Clerk, Office of the Chief Counsel, Federal Railroad

Administration, 400 Seventh Street, SW., Washington, D.C. 20590. Persons desiring to be notified that their written comments have been received by FRA should submit a stamped, self-addressed postcard with their comments. The Docket Clerk will indicate on the postcard the date on which the comments were received and will return the card to the addressee. Written comments will be available for examination, both before and after the closing date for written comments, during regular business hours in Room 7321A of the Nassif Building, 400 Seventh Street SW., Washington, D.C. 20590.

(2) **Public Hearing:** A public hearing will be held in Room 2230 of the Nassif Building, 400 Seventh Street SW., Washington, D.C. 20590. Persons desiring to make an oral statement at the hearing should notify the Docket Clerk by telephone (202-426-2761) or by writing to: Docket Clerk, Office of the Chief Counsel, Federal Railroad Administration, 400 Seventh Street SW., Washington, D.C. 20590.

FOR FURTHER INFORMATION CONTACT:

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SUPPLEMENTARY INFORMATION:**I. Background**

During 1978 the FRA initiated a General Safety Inquiry for the purpose of evaluating and improving its safety regulatory program. The inquiry and the hearings related to the Track Safety Standards portion of the regulatory program were announced in the May 8, September 25 and October 4, 1978 issues of the **Federal Register** (43 FR 19696, 43 FR 43339, and 43 FR 45905).

Based on those hearings, research findings, technical innovations, available accident data and seven years experience with the existing standards, the FRA proposed extensive changes to the standards. The NPRM containing these changes was published in the **Federal Register** on September 9, 1979 (44 FR 52104). The proposal generated considerable controversy. After analyzing the comments in response to this proposal, the FRA concluded that it was not possible to develop an appropriate final rule on the basis of that NPRM. Accordingly, the FRA published a notice withdrawing that NPRM. This withdrawal notice was published on June 25, 1981 in the **Federal Register** (46 FR 32898).

Since withdrawing the original proposal, the FRA has been reviewing the comments received in order to develop a new proposal. The FRA has concluded that many of the controversial features of the prior NPRM, including the imposition of "strict liability" for non-compliance with the standards, imposition of speed limitations based upon weight of rail and elimination of the differential for speeds of passenger trains, require long term study and analysis. However, some of the initial proposals do not require such lengthy review and the FRA has decided to address these proposals in this NPRM.

In selecting the areas for change that are reflected in this proposal, the FRA has had the benefit of joint letters submitted by the Association of American Railroads (AAR) and the Railway Labor Executives Association (RLEA). The joint AAR/RLEA letters were delivered to FRA on November 6, 1981 and December 18, 1981 and copies have been included in the public docket in this proceeding. The docket, including those letters, is available for inspection during regular business hours in Room 7321A of the Nassif Building.

After reviewing the joint AAR/RLEA letters, which indicate that AAR and RLEA agree that specific portions of these standards need to be changed, the FRA has decided to use the AAR/RLEA letters as the basis for proposing the

technical revisions and updating of the existing standards that are contained in this NPRM. In their joint letters, the AAR and RLEA provided specific regulatory language that they agreed would be an appropriate substitute for existing provisions of several sections of the standards and identified thirteen provisions that should be entirely deleted.

The FRA appreciates the assistance of the AAR and RLEA in focusing attention on those provisions that they believe are in need of revision and in furnishing specific regulatory language expressing their agreement on the revisions required.

II. DISCUSSION OF PROPOSAL**A. Objectives of the Proposed Track Safety Standards**

In October of 1971, the initial FRA Track Safety Standards were issued (36 FR 20336) in response to the congressional mandate of the Federal Railroad Safety Act of 1970 (45 U.S.C. 421 *et seq.*). The original standards were based on the safety practices of the rail industry at that time, available track-related data, and public comments and testimony. The goal of these initial standards was to establish "minimum requirements for safety," rather than to include all "preferred or recommended practices from an economic and engineering standpoint." The standards were not intended as the last word on track safety conditions, but as an evolving set of safety requirements: " * * * the standards * * * will be continually reviewed and revised by FRA in light of technical innovations, the results of the FRA research and development program, and experience under these standards," 36 FR 20336.

The approach taken when the initial standards were introduced was used in developing the amendments proposed in this notice. FRA seeks to set forth the minimum necessary requirements for safe track rather than a comprehensive list of all potentially hazardous conditions. The railroads, not FRA will remain directly responsible for finding and correcting all unsafe track conditions. The proposal is not a major overhaul of the standards; instead, it is intended to refine in a limited manner the existing requirements.

The limited nature of this proposal is best illustrated by the fact that the FRA is proposing to modify nine substantive provisions and to delete another group of provisions that have no demonstrable effect on track safety.

B. Section-by-Section Analysis**§ 213.3 Application**

The existing § 213.3 extends application of 49 CFR Part 213 (Track Safety Standards) to all standard gage track in the general system of transportation with the exception of trackage located inside an installation that is not part of the general system, and track that is used exclusively for rapid transit, commuter or other short haul passenger service in a metropolitan or suburban area.

The changes proposed in the previous NPRM sought to clarify application of the Track Safety Standards in several ways: (1) By resolving ambiguity concerning the phrase "general railroad system of transportation" in paragraph (a); (2) by eliminating the exclusion of track used exclusively for rapid transit, commuter or other short haul passenger service in paragraph (b)(2); and (3) by eliminating the provisions of paragraph (c) which indicate when various subparts went into effect.

In light of the comments received, the FRA has decided to propose a more limited change to this section. The new proposal would only eliminate paragraph (c) of the existing regulation and add a new paragraph (b)(3) to this section.

The new paragraph (b)(3) would exempt certain track from the minimum requirements for Class 1 track if that track meets the parameters established in proposed § 213.4.

§ 213.4 Excepted Track

In this section the FRA is proposing to permit certain yard and low density branch lines to be excepted from the application of the standards.

The purpose of this exception is to address an important reality that has plagued the administration of the current standards. There are many track segments, particularly on low density branch lines, that are used only for the transportation of cargo at low speeds. FRA believes that these segments are generally on comparatively level terrain and pass through areas where it is highly unlikely that a derailment would endanger persons along the railroad right-of-way. Moreover, the risk of injury to train crew members in a derailment in these circumstances is remote. Consequently, only property would be seriously endangered by derailments on excepted track segments.

In formulating the language for this section, the FRA has reviewed the prior NPRM, the comments received in response to that NPRM and the regulatory language suggested jointly by

the AAR and RLEA. To be eligible for the excepted status under this proposal, the track segment would have to be located more than 30 feet from any adjacent track where trains could operate simultaneously at speeds in excess of 10 miles per hour and could not be situated on a bridge, bridge approach or public street if cars containing hazardous materials are to be hauled. The eligible track would have to be identified by the railroad and be subjected to specific operational constraints. The operational constraints would preclude the operation of revenue passenger trains; limit the speed of all trains; and restrict the volume of hazardous materials moved over that track. Additionally, the railroads would have to continue inspecting these segments to monitor their condition.

§ 213.5 Responsibility of Track Owners

The FRA proposes to revise only the provisions of paragraph (a) of § 213.5. That paragraph currently requires that any track owner who knows or has notice that a segment of track does not comply with the standards must either halt operations or immediately bring the track into compliance. The immediate compliance language of this section has been viewed by some parties as requiring immediate restoration or renewal of the track to eliminate the particular defective condition even though other sections permit alternate remedial actions.

The FRA proposes to revise this paragraph to provide a clear regulatory link between this section and other provisions of the standards, such as § 213.9 and § 213.113, which permit remedial actions that do not constitute either restoration or renewal. The FRA believes that this proposed cross referencing will more clearly express the intent of the regulation.

§ 213.9 Class of Track: Operating Speed Limits

The current provisions of § 213.9(b) require that any track which does not comply with all of the requirements for its intended class must be reclassified to the next lower class of track for which it does meet all of the requirements. Additionally, if a segment of track does meet at least Class 1 requirements, operations may not continue unless restoration work is immediately instituted under the provisions of § 213.11.

The requirement to immediately institute restoration work under the supervision provisions of § 213.11 has proven to be too inflexible a response to deteriorated track. Therefore, the FRA

proposes to revise the language of this section to permit railroads to have some additional flexibility in resolving defective conditions while maintaining vital rail service over that track.

The proposed change would require that a qualified person inspect the defective condition to determine whether trains can continue to operate safely over that track segment. If necessary, that person would impose appropriate safety restrictions. To assure that defective track conditions are corrected in a reasonable time, the FRA proposes to limit the time that operations may be conducted over the defective condition to a period of not more than 30 days.

The proposed change will permit a railroad to utilize more effectively its limited resources and to perform track work in a more systematic fashion. It is based on FRA's experience in granting temporary waivers of compliance and comments received in response to the prior NPRM indicating that the inflexibility of the existing standards frequently hinder or impair the performance of planned maintenance activities.

§ 213.11 Restoration or Renewal of Track Under Traffic Condition

Only a minor modification is proposed in § 213.11. Section 213.11 currently provides that if track, which does not comply with these standards, continues to handle traffic while it is being restored or renewed, it must be under the continuous supervision of a person designated to perform this function. Because of past misunderstanding by some railroads as to what constitutes "continuous supervision," the FRA proposes to add language to explain the concept of "continuous supervision." The purpose of this change is to express more clearly the original intent of this section that a qualified person must be present and continuously observe and supervise work on track that is being restored or renewed and does not comply fully with the requirements of the Track Safety Standards. The added language explicitly states that, if the work is being performed over a large work area, it will not be necessary that the qualified person be in personal observation of each phase or segment of the work being performed.

§ 213.53 Gage

The current provisions of § 213.53(b) specify the minimum and maximum distance between the heads of the rails. The minimum distance is uniform for all tracks and the maximum distance varies by Class of track and by the existence of curvature in the track.

In responding to the prior NPRM, the commenters urged that the FRA give consideration to increasing the gage requirements because the existing regulations fail to adequately take into consideration factors such as manufacturers' allowable tolerances found in rail base dimensions, tie plate shoulders and tie plate spike holes and the slight gage widening attributed to normal rail wear.

After further review, the FRA has decided to propose revisions to portions of these specifications to more accurately reflect needed safety tolerances. The proposal would permit additional distances from those currently specified for tangent track in Class 1 through 6 and additional distances from those currently specified for curved track in Classes 1, 3 and 6. These proposed changes should alleviate problems of manufacturing tolerances and normal rail wear that can produce non-compliance with these standards without creating an unsafe condition.

§ 213.109 Crossties

The current provisions of § 213.109 identify the conditions that render a crosstie defective and specify the number and location of crossties without defective conditions that must be present to support each Class of track. The FRA proposes to reword, restructure and revise this section. Proposed § 213.109 would eliminate the reference to timber materials for crossties and redefine what constitutes a crosstie that is without defective conditions. The revision also proposes to alter the positioning of such crossties at joint locations. Additionally, the proposal would delete the existing prohibition in paragraph (e) against using interlaced crossties because that constraint is not necessary from a safety standpoint.

§ 213.113 Defective Rails

The current provisions of § 213.113 identify a variety of rail defects and prescribe specific remedial actions to be taken once a railroad has learned of the defect. The FRA proposes to alter the provisions of this section in two ways.

The proposal would modify some of the specific remedial action requirements of the existing section to permit the track owner some additional flexibility in determining the necessary remedial action to be taken until the defective rail is replaced. The proposal would also delete § 213.113(b) and (c)(12-14) which concern minor rail surface imperfections.

In developing the existing standards, the FRA was faced with the absence of reliable data that would permit reasonable predictions about the growth of a rail flaw from the point of detectability to the point of in-service failure. The FRA responded to this situation by placing stringent operational constraints on movements over known defects. This approach placed a premium on removing a rail from service so as to eliminate operational limitations.

An unanticipated consequence of FRA's approach has been that railroads now limit or defer rail flaw inspection activities in order to avoid the stringent operational constraints imposed by this section. To the degree that this section fosters an "ignorance is bliss" mentality, the FRA is defeating the effort to improve rail safety. Consequently, the FRA has been reviewing its conceptual approach to this section.

As part of that review, FRA ascertained the status of the research work concerning the predictability of rail flaw growth, that has been conducted since the formulation of this section. Unfortunately, the many variables, such as temperature fluctuations, axle loadings, total tonnage, train speed and general maintenance practices, have impeded the development of predictable general patterns of defect growth. As a result, the FRA is not able to revise this section to prescribe specific remedial actions tailored to effectively encompass the wide spectrum of predictable growth patterns to ensure removal of defective rail prior to in-service failure.

The FRA also examined the available accident data to identify instances where a railroad continued operations over known rail flaw defects to the point where an in-service failure caused a derailment. Only one known instance has been identified in which a railroad experienced a derailment by operating over a known defect for which the appropriate remedial action was not taken. This accident data strongly indicates that once a rail flaw has been detected the railroads take effective remedial action to prevent an in-service failure and resulting derailment.

Based on this accident data, the absence of research data to revise the remedial action requirements with concise tailored provisions and the current discouragement or more extensive rail flaw inspections, the FRA has decided to revise this section to permit the railroads some additional flexibility in prescribing the remedial action that must be taken once a rail flaw defect has been identified. The FRA believes that this proposal will

permit the railroads to more effectively use their resources and will provide the necessary incentive to increase the use of rail flaw detection inspections.

§ 213.127 Rail Fastenings

Changes to this section are being proposed in recognition of the increased use of rail fastening other than spikes. The proposed language would change the caption of existing § 213.127 from "Track Spikes" to "Rail Fastenings." The proposed § 213.127 also attempts to structure this provision in terms of a performance standard by focusing on the major functioning of rail fastenings which is to effectively restrain lateral rail movement. This proposal replaces the existing provision that focuses on the number of rail spikes rather than the ability of those devices to provide restraint.

The remaining proposed revisions are described below and all involve deletions from the existing standards. These deletions basically follow the proposed deletions contained in the prior NPRM because FRA did not receive adverse comment in response to the prior proposal to delete these provisions. The FRA believes that these deletions will not have any adverse safety impact and will remove at least one burdensome recordkeeping requirement.

§ 213.61 Curve Data for Classes 4 through 6 Track

Under current § 213.61, a railroad is required to maintain records on curve data for track Classes 4 through 6. It is proposed to delete § 213.61 because it is primarily a recordkeeping requirement that has no direct bearing on track safety. Moreover, between 1975 and 1977, FRA inspectors noted only 13 deviations from this section—less than 5 defects per year. This deletion would reduce paperwork and related costs for the railroads.

§ 213.105 Ballast and Disturbed Track

It is proposed to delete § 213.105 because its provisions concerning the condition of ballast in disturbed track are not sufficiently specific to provide meaningful guidance to railroad personnel and are virtually unenforceable. In the three year period from 1975 through 1977, FRA filed only one defect under this section. Research has not established specific, measurable guidelines for determining when "ballast is sufficiently compacted" in disturbed track. This section may be re-established in the future as a result of further research and additional reliable data.

§ 213.117 Rail End Batter

The existing § 213.117 prescribes limits on the amount of "batter" (damage or disfigurement) that rail ends may sustain. When the ends of adjoining rails are vertically or laterally mismatched, they may be damaged by the battering and pounding they receive from the wheels of passing equipment. The proposed changes would delete § 213.117 in its entirety because its provisions are maintenance rather than safety standards. FRA recognizes that if rail end batter is left uncorrected, it may eventually lead to broken and/or cracked angle bars, defective rails, and deteriorated surface conditions. However, each of these hazardous conditions is addressed elsewhere in the standards. FRA plans to conduct further research on the effect of rail tread mismatch and rail end batter on rail life and wheel damage. This research may lead to establishing safety requirements in this area.

§ 213.115 Rail Anchoring

FRA proposes to delete § 213.125 concerning use of rail anchors. While rail anchors are an important aspect of lateral track stability, the existing rule is virtually unenforceable because of the vagueness of the term "effectively controlled." It is recognized that if longitudinal rail movement is permitted to exist, conditions may develop that lead to either track buckling or pull-aparts, both of which can and do cause train accidents. Therefore, FRA is conducting research in this area in order to more thoroughly understand track structure. This section may be re-established when research results identify specific, measurable requirements for safe operations.

§ 213.129 Track Shims and Planks Used in Shimming

FRA proposes to delete §§ 213.129 and 213.131 that address the use of track shims and planks, which are pieces of wood that are placed between the base of the rail and the top of a tie. They are particularly useful to restore track to the required geometric threshold after it has been displaced by frost heaves and ground thaws. As long as the requirements of the other sections of this part, such as § 213.63, are met, the maintenance method used to achieve this result is immaterial from the standpoint of safety. Furthermore, there is no evidence that shims or planks have ever been the sole cause of a derailment or other train accident.

§ 213.109 Continuous Welded Rail

Current § 213.119 provides that continuous welded rail must be installed at or adjusted for a rail temperature range that should not result in forces that will produce lateral displacement of the track or the pulling apart of rail ends or welds. It also provides that after installation, continuous welded rail should not be disturbed at rail temperatures higher than its installation or adjusted temperature. FRA proposes to delete this section in its entirety because it is so general in nature that it provides little guidance to railroads and is difficult to enforce. From 1975 through 1978, a total of only 14 defects were reported by FRA inspectors and 1 violation was filed under this section. While the importance of controlling thermal stresses within continuous welded rail has long been recognized, research has not advanced to the point where specific safety requirements can be established. Continuing research may produce reliable data in this area in the future.

§ 213.123 Tie Plates

FRA proposes to delete § 213.123(b) which prohibits the shoulders of tie plates from being under the base of rail. While this prohibition reflects good maintenance practice, it is not necessary for safe operations. While a tie plate shoulder under the base of rail may in time result in a broken base rail, FRA feels that this subject is adequately addressed in § 213.113.

Track Appliances and Track-Related Devices

It is proposed that a portion of Subpart E, Track Appliances and Track-Related Devices, be deleted. These appliances and devices do not have a significant impact on track safety. A review of the accident history for the four years from 1975 through 1978 revealed a total of only 12 accidents involving track appliances and devices, all of which occurred at speeds of 10 miles per hour or less, and none of which resulted in a death or personal injury. The FRA proposes to retain the existing provisions of section 205(a) concerning derails.

III. Regulatory Impact

This proposal has been evaluated in accordance with existing regulatory policies including Executive Order 12291 issued on February 17, 1981 (46 FR 1391). The proposal primarily contains technical revisions to the existing standards.

In general, the revision will serve to reduce the economic burdens of the

existing regulation by exempting some track from full compliance with these standards. Additionally, a reduction in recordkeeping burdens and their associated costs may produce some savings. The FRA has not been able to quantify these economic impacts because it is not clear how extensively the railroads can utilize these changes.

Because the proposal is primarily technically oriented, the FRA has concluded that the proposal will not constitute a major rule under the terms of Executive Order 12291 or a significant rule under DOT's regulatory policies and procedures. The FRA will review this determination in the light of any comments received in response to this proposal prior to issuance of a final rule.

The proposal will only have a direct economic impact on railroads and its primary impact will be on large railroads which own hundreds of miles of track. The proposal does not place any new requirements or burdens on the public and to some extent it is deregulatory in nature. The proposal will not have a significant economic impact on any small entity. Based on these facts, it is certified that the proposal will not have a significant economic impact on a substantial number of small entities under the provisions of the Regulatory Flexibility Act (Pub. L. 95-354, 94 Stat. 1164, September 19, 1980).

Additionally, the proposal has also been reviewed in light of the FRA procedures for ensuring full consideration of the environmental impacts of FRA actions as required by the National Environmental Policy Act ("NEPA," 42 U.S.C. 4321 *et seq.*), other environmental statutes, executives orders, and DOT Order 5610.113.

These FRA procedures require that an "environmental assessment" be performed prior to all major FRA actions. The procedures contain a provision that enumerates seven criteria which, if met, demonstrate that a particular action is not a "major" action for environmental purposes. These criteria involve diverse factors, including environmental controversy; and availability of adequate relocation housing; the possible inconsistency of the action with Federal, State, or local law; the possible adverse impact on natural, cultural, recreational, or scenic environments; the use of properties covered by section 4(f) of the DOT Act; and the possible increase in traffic congestion. The proposed revision of track requirements meets the seven criteria that establish an action as a non-major action.

For the reasons above, the FRA has determined that the proposed revision of

Part 213, Track Safety Standards, does not constitute a major FRA action requiring an environmental assessment.

Participation in This Proceeding**Written Comments and Hearing**

Interested persons are invited to participate in this proceeding by submitting written data, views, or comments. Communications should identify the regulatory docket number and the number, and must be submitted in triplicate to the Docket Clerk, Office of the Chief Counsel, Federal Railroad Administration, 400 Seventh Street, SW., Washington, D.C. 20590. Persons desiring receipt of their communications to be acknowledged should attach a stamped pre-addressed postcard to the first page of each communication. Communications received before March 22, 1982 will be considered before final action is taken on the proposed rules. All comments received will be available for examination by interested persons at any time during regular working hours in Room 7321A, Nassif Building, 400 Seventh Street, SW., Washington, D.C. 20590.

In addition, the FRA will conduct a public hearing on March 16, 1982 in Washington, D.C. at 10:00 a.m. The hearing will be informal, and not a judicial or evidentiary hearing. There will be no cross examination of persons making statements. A staff member of FRA will make an opening statement outlining the matter set for the hearing.

Interested persons may present oral or written statements at the hearing. All statements will be made a part of the record of the hearing and will be a matter of public record. Any persons who wishes to make an oral statement at the hearing should notify the Docket Clerk, Office of the Chief Counsel, Federal Railroad Administration, 400 Seventh Street, SW., Washington, D.C. 20590 (Phone 202-428-2761), before March 10, 1982.

The proposals contained in this notice may be changed in light of the oral statements made at the public hearing, or the written comments submitted in response to this notice.

Secs. 202 and 208 of the Federal Railroad Safety Act of 1970, as amended, 49 U.S.C. 431 and 437; Regulations of the Office of the Secretary of Transportation (49 CFR 1.49(n)).

Issued in Washington, D.C. on February 11, 1982.

Robert W. Blanchette,
Administrator.

PART 213—TRACK SAFETY STANDARDS

In consideration of the foregoing, the FRA proposes the following:

1. To revise § 213.3 to read as follows:

§ 213.3 Application.

(a) Except as provided in paragraph (b) of this section, this part applies to all standard gage track in the general railroad system of transportation.

(b) This part does not apply to track—

(1) Located inside an installation which is not part of the general railroad system of transportation;

(2) Used exclusively for rapid transit, commuter or other short-haul passenger service in a metropolitan or suburban area; or

(3) Designated as excepted track under the provisions of § 213.4.

2. To add a new § 213.4 to read as follows:

§ 213.4 Excepted track.

A track owner may designate a segment of track as excepted track provided that:

(a) The segment is identified in the timetable, special instructions, general order or other appropriate records which are available for inspection during regular business hours;

(b) The identified segment is not located within 30 feet of an adjacent track which can be subjected to simultaneous use at speeds in excess of 10 miles per hour;

(c) The identified segment is inspected in accordance with § 213.233(c) at the frequency specified for Class 1 track;

(d) The identified segment of track is not located on a bridge including the track approaching the bridge for 100 feet on either side, public street or highway if railroad cars containing commodities, required to be placarded by the Hazardous Materials Regulations (49 CFR Part 172), are moved over that track; and

(e) The railroad conducts operations on the identified segment under the following conditions:

(1) No train shall be operated at speeds in excess of 10 miles per hour;

(2) No revenue passenger train shall be operated; and

(3) No freight train shall be operated that contains more than 5 cars required to be placarded by Hazardous Materials Regulations (49 CFR Part 172).

3. To amend § 213.5 by revising paragraph (a) to read as follows:

§ 213.5 Responsibility of track owners.

(a) Any owner of track to which this part applies who knows or has notice that the track does not comply with the requirements of this part, shall—

- (1) Bring the track into compliance;
- (2) Halt operations over that track; or
- (3) Operate under authority of a person designated under § 213.7(a)(1)(i) subject to conditions set forth in §§ 213.4, 213.9, 213.11, 213.33, 213.37, and 213.113.

4. To amend § 213.9 by revising paragraph (b) to read as follows:

§ 213.9 Class of track: Operating speed limits.

(b) If a segment of track does not meet all of the requirements for its intended class, it is reclassified to the next lowest class of track for which it does meet all of the requirements of this part. However, if the segment of track does not at least meet the requirements for Class 1 track, operations may continue, for a period of not more than thirty days without bringing the track into compliance, under the authority of a person designated under § 213.7(a)(1)(i) after that person determines that operations may safely continue and subject to any limiting conditions specified by such person.

5. To revise § 213.11 to read as follows:

§ 213.11 Restoration or renewal of track under traffic conditions.

If, during a period of restoration or renewal, track is under traffic conditions and does not meet all of the requirements prescribed in this part, the work on the track must be under the continuous supervision of a person designated under § 213.7(a)(1)(i). The term "continuous supervision" as used in this section means the physical presence of the appropriate person at a job site. However, since the work may be performed over a large area, it is not necessary that each phase of the work be done under the visual supervision of such person.

6. To amend § 213.53 by revising paragraph (b) to read as follows:

§ 213.53 Gage.

(b) Gage must be within the limits prescribed in the following table:

Class of track	The gage must be at least	But not more than
1	4' 8"	4' 10"
2 and 3	4' 8"	4' 9 1/4"
4 and 5	4' 8"	4' 9 1/2"
6	4' 8"	4' 9 1/4"

7. To revise § 213.109 to read as follows:

§ 213.109 Crossties.

(a) Crossties shall be made of a material to which rail can be securely fastened.

(b) Each 39 foot segment of track shall have:

(1) A sufficient number of crossties which in combination provide effective support that will:

(i) Hold gage within the limits prescribed in § 213.53(b);

(ii) Maintain surface within the limits prescribed in § 213.63; and

(iii) Maintain alignment within the limits prescribed in § 213.55.

(2) The minimum number and type of crossties specified in paragraph (c); and

(3) At least one crosstie of the type specified in paragraph (c) which is located at a joint location as specified in paragraph (d).

(c) Class 1 track shall have 5 crossties, Classes 2 and 3 track shall have 8 crossties, Classes 4 and 5 track shall have 12 crossties and Class 6 track shall have 14 crossties which are not:

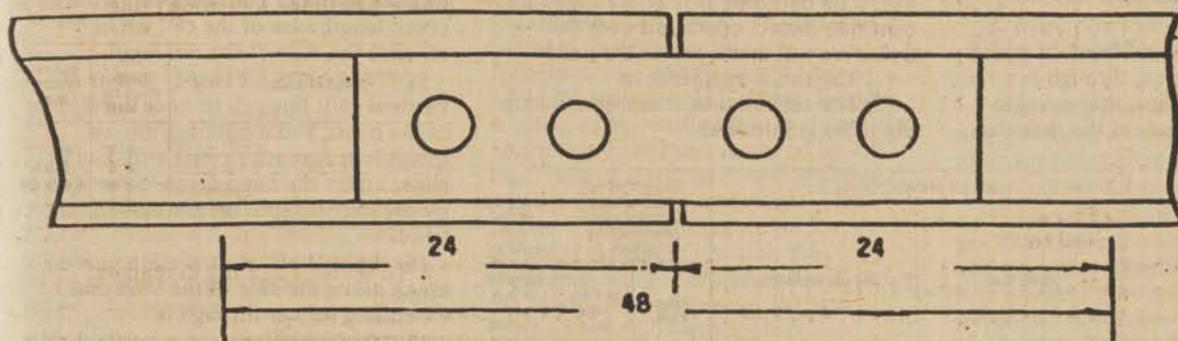
(1) Broken through;

(2) Split or otherwise impaired to the extent the crossties will allow the ballast to work through, or will not hold spikes or rail fasteners;

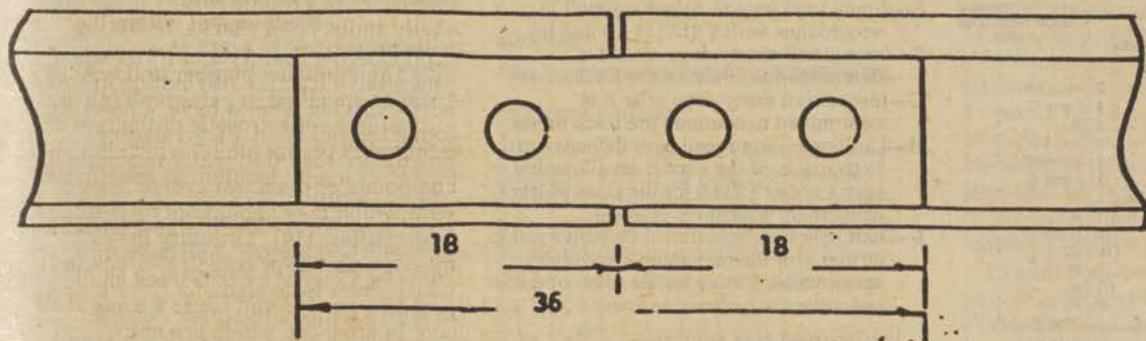
(3) So deteriorated that the tie plate or base of rail can move laterally more than $\frac{1}{2}$ inch relative to the crossties; or

(4) Cut by the tie plate through more than 40 percent of a tie's thickness.

(d) Class 1 and Class 2 track shall have one crosstie whose centerline is within 24 inches of the rail joint location and Classes 3 through 6 track shall have one crosstie whose centerline is within 18 inches of the rail joint location. The relative position of these ties is described in the following table.

Classes 1 and 2

Each rail joint in Classes 1 and 2 track shall be supported by a least one crosstie specified in paragraph (c) whose centerline is within the 48" shown above.

Classes 3 through 6

Each rail joint in Classes 3 through 6 shall be supported by at least one crosstie specified in paragraph (c) whose centerline is within the 36" shown above.

8. To revise § 213.113 to read as follows:

§ 213.113 Defective rails.

(a) When an owner of track to which this part applies learns, through inspection or otherwise, that a rail in that track contains any of the defects

listed in the following table, a person designated under § 213.7 shall determine whether or not the track may continue in use. If he determines that the track may continue in use, operation over the defective rail is not permitted until—

- (1) The rail is replaced; or
- (2) The remedial action prescribed in the table is initiated:

Defect	Length of defect (inch)		Percent of rail head cross-sectional area weakened by defect		If defective rail is not replaced, take the remedial action prescribed in note	
	More than	But not more than	Less than	But not less than		
Transverse fissure			20		B.	
			100		B.	
Compound fissure			20		A.	
			100		B.	
Detail fracture			20		A.	
Engine burn fracture			100		C.	
Defective weld			20		D.	
			100		A or E and H.	

	Length of defect (inch)		If defective rail is not replaced, take the remedial action prescribed in note
	More than	But not more than	
Horizontal split head	0	2	H and F.
	2	4	I and G.
Vertical split head	4		B.
	(1)	(1)	A.
Split web	0	½	H and F.
Piped rail	½	3	I and G.
Head web separation	3		B.
	(1)	(1)	A.
Bolt hole crack	0	½	H and F.
	½	1½	G.
	(1)	(1)	B.
	(1)	(1)	A.
Broken base	0	6	E.
Ordinary break	6		A or E and I.
Damaged rail			A or E.
			C.

¹ (Break out in rail head).

Remedial Action

Note:

A—Assign person designated under § 213.7 to visually supervise each operation over defective rail.

B—Limit operating speed over defective rail to that authorized by a person designated under § 213.7(a)(1)(i).

C—Apply joint bars bolted only through the outermost holes to defect within 20 days after it is determined to continue the track in use. In the case of classes 3 through 6 track, limit operating speed over defective rail to 30 m.p.h. until angle bars are applied.

D—Apply joint bars bolted only through the outermost holes to defect within 10 days after it is determined to continue the track in use. Limit operating speed over defective rail to that authorized by a person designated under § 213.7(a)(1)(i) until angle bars are applied; thereafter, limit speed to 50 m.p.h. or the maximum allowable speed under § 213.9 for the

class of track concerned, whichever is lower.

E—Apply joint bars to defect and bolt in accordance with § 213.121 (d) and (e).

F—Inspect rail ninety days after it is determined to continue the track in use.

G—Inspect rail thirty days after it is determined to continue the track in use.

H—Limit operating speed over defective rail to 60 m.p.h. or the maximum allowable speed under § 213.9 for the class of track concerned, whichever is lower.

I—Limit operating speed over defective rail to 30 m.p.h. or the maximum allowable speed under § 213.9 for the class of track concerned, whichever is lower.

(b) As used this section—

(1) "Transverse Fissure" means a progressive crosswise fracture starting from a crystalline center or nucleus inside the head from which it spreads outward as a smooth, bright, or dark, round or oval surface substantially at a right angle to the length of the rail. The distinguishing features of a transverse fissure from other types of fractures or defects are the crystalline center or nucleus and the nearly smooth surface of the development which surrounds it.

(2) "Compound Fissure" means a progressive fracture originating in a horizontal split head which turns up or down in the head of the rail as a smooth, bright, or dark surface progressing until substantially at a right angle to the length of the rail. Compound fissures require examination of both faces of the fracture to locate the horizontal split head from which they originate.

(3) "Horizontal Split Head" means a horizontal progressive defect originating inside of the rail head, usually one-quarter inch or more below the running

surface and progressing horizontally in all directions, and generally accompanied by a flat spot on the running surface. The defect appears as a crack lengthwise of the rail when it reaches the side of the rail head.

(4) "Vertical Split Head" means a vertical split through or near the middle of the head, and extending into or through it. A crack or rust streak may show under the head close to the web or pieces may be split off the side of the head.

(5) "Split Web" means a lengthwise crack along the side of the web and extending into or through it.

(6) "Piped Rail" means a vertical split in a rail, usually in the web, due to failure of the shrinkage cavity in the ingot to unite in rolling.

(7) "Broken Base" means any break in the base of a rail.

(8) "Detail Fracture" means a progressive fracture originating at or near the surface of the rail head. These fractures should not be confused with transverse fissures, compound fissures, or other defects which have internal origins. Detail fractures may arise from shelly spots, head checks, or flaking.

(9) "Engine Burn Fracture" means a progressive fracture originating in spots where driving wheels have slipped on top of the rail head. In developing downward they frequently resemble the compound or even transverse fissure with which they should not be confused or classified.

(10) "Ordinary Break" means a partial or complete break in which there is no sign of a fissure, and in which none of the other defects described in this paragraph are found.

(11) "Damaged Rail" means any rail broken or injured by wrecks, broken, flat, or unbalanced wheels, slipping, or similar causes.

9. To revise § 213.127 to read as follows:

§ 213.127 Rail fastenings.

Each 39 foot segment of rail shall have a sufficient number of fastenings which, in the determination of a qualified Federal or state track inspector, effectively maintain gage within the limits prescribed in § 213.53(b). The term "qualified state track inspector" as used in this section means a track inspector who meets the qualification requirements of 49 CFR 212.75.

§ 213.123 [Amended]

10. To amend § 213.123 Tie Plates by removing paragraph (b) in its entirety.

§ 213.205 [Amended]

11. To amend § 213.205 Derails by removing paragraph (b) in its entirety.

§§ 213.61, 213.105, 213.117, 213.119, 213.125, 213.129, 213.131 and 213.207
[Removed]

12. To remove the following sections in their entirety:

Sec.

213.61 *Curve data for Classes 4 through 8 track;*

213.105 *Ballast; disturbed track;*

213.117 *Rail end batter;*

213.119 *Continuous welded rail;*

213.125 *Rail anchoring;*

213.129 *Track shims;*

213.131 *Planks used in shimming; and*

213.207 *Switch heaters.*

[FR Doc. 82-4297 Filed 2-17-82; 8:45 am]

BILLING CODE 4910-06-M

ADDRESSES: (1) Written Comments: Written comments should identify the docket number and the notice number and must be submitted in triplicate to the Docket Clerk, Office of the Chief Counsel, Federal Railroad Administration, 400 Seventh Street, S.W., Washington, D.C. 20590. Persons desiring to be notified that their written comments have been received by FRA shall submit a stamped, self-addressed postcard with their comments. The Docket Clerk will indicate on the postcard the date on which the comments were received and will return the card to the addressee. Written comments will be available for examination, both before and after the closing date for written comments, during regular business hours in room 7321A of the Nassif Building at the above address.

(2) Public Hearing: A public hearing will be held in room 2230 of the Nassif Building. Persons desiring to make oral statements at the hearing should notify the Docket Clerk by telephone (202-426-8836) or by writing to: Docket Clerk, Office of the Chief Counsel, Federal Railroad Administration, at the above address.

FOR FURTHER INFORMATION CONTACT:

Principal Authors

Principal Program Person: Leavitt A. Peterson, Office of Safety, Federal Railroad Administration, Washington, D.C. 20590. Telephone 202-426-0897. Principal Attorney: Michael E. Chase, Office of the Chief Counsel, Federal Railroad Administration, Washington, D.C. 20590. Telephone 202-426-8836.

SUPPLEMENTARY INFORMATION:

Background

Regulatory Reform

On February 17, 1981, the President issued Executive Order 12291. In that Order, he established procedures applicable to all Executive agencies to improve existing and future regulations. The Order set a policy of reducing the burdens of existing and future regulations, increasing agency accountability for regulatory actions, providing for presidential oversight of the regulatory process, minimizing duplication and conflict of regulations, and ensuring well-reasoned regulations. To achieve the policy objective, the Order requires Agencies to adhere to the following requirements:

(1) Administrative decisions shall be based on adequate information concerning the need for and consequences of proposed government action;

(2) Regulatory action shall not be undertaken unless the potential benefits to society from the regulation outweigh the potential costs to society;

(3) Regulatory objectives shall be chosen to maximize the net benefits to society;

(4) Among alternative approaches to any given regulatory objective, the alternative involving the least net cost to society shall be chosen; and

(5) Agencies shall set regulatory priorities with the aim of maximizing the aggregate net benefits to society, taking into account the condition of the particular industries affected by regulations, the condition of the national economy, and other regulatory actions contemplated for the future.

In response to the regulatory policies exemplified in Executive Order 12291, DOT received from the public numerous recommendations for regulatory change. The power brake rule was identified in early 1981 by the Association of American Railroads (AAR) and by other interested persons as a prime candidate for revision. The AAR's statement of recommendations for change in FRA's safety regulations and in the statutes relating to rail safety, entitled "Federal Railroad Safety Statutes and Safety Regulations Must Be Reexamined," has been included in the docket. Also included in the docket is an analysis prepared by AAR at the request of FRA of the costs associated with certain current regulatory requirements.

In addition, a review of railroad power brake regulations was part of FRA's General Safety Inquiry conducted in 1978 and 1979. A two-day public hearing on railroad power brakes was held September 13 and 14, 1978. Information developed as part of the General Safety Inquiry was considered in the development of this notice, which proposes elimination or modification of five specific requirements in the current rule. Other possible changes to the current rule, which generally are technical in nature, will be considered at a later date when FRA proposes a general update and revision of 49 CFR Part 232.

Finally, the changes in this proposal are responsive to a joint recommendation by rail labor and rail management regarding possible regulatory changes. Their agreement is reflected in a letter to the FRA Administrator, dated November 6, 1981 and signed by J. R. (Jim) Snyder, Chairman, Safety Committee, Railway Labor Executives' Association and by William H. Dempsey, President and Chief Executive Officer, Association of

49 CFR Part 232

[Docket No. PB-6, Notice No. 1]

Railroad Power Brakes and Drawbars; Miscellaneous Proposed Amendments

AGENCY: Federal Railroad Administration (FRA), DOT.

ACTION: Notice of proposed rulemaking.

SUMMARY: This notice proposes to amend the rules pertaining to railroad power brakes. The proposed amendments would eliminate or modify certain costly and controversial rules no longer considered necessary for safety and clarify other provisions. The proposed changes are (1) modification of the interchange inspection, (2) extension of the 500 mile inspection to 1000 miles, (3) extension of the maximum permissible piston travel limit from 10 inches to 10½ inches, (4) elimination of the requirement for a single car test of brake equipment on a date of last test basis (IDT) and (5) revision of the initial terminal test requirements to ensure that the engineer has adequate notice that the test has been satisfactorily performed. This action is taken by FRA in an effort to reduce unnecessary and burdensome regulation and to improve its safety regulatory program.

DATES: (1) Written Comments: Written comments must be received before March 22, 1982. Comments received after that date will be considered to the extent possible without incurring additional expense or delay. A 30-day comment period has been chosen instead of a 60-day period in light of the recent power brake safety inquiry and the fact that this proposed rule reflects a broad consensus for updating the power brake regulations.

(2) Public Hearing: A public hearing will be held at 10:00 a.m. on March 17, 1982. Any person who desires to make an oral statement at the hearing should notify the Docket Clerk before March 10, 1982, by phone or by mail.

American Railroads. A copy of the letter is also in the docket.

The five requirements proposed for revision or elimination are the interchange inspection requirement (49 CFR 232.12(a)(3)), the maximum permissible piston travel limit for body mounted brakes (49 CFR 232.11(c)), the 500 mile intermediate inspection (49 CFR 232.12(b)), the single car test requirement (49 CFR 232.17), and the initial terminal test requirements. The changes are proposed to reduce unnecessary and burdensome regulation and improve FRA's safety regulatory program.

Background on the Train Air Brake System and the Individual Car Air Brake System

The train air brake system is complex and sensitive. A simplified and summarized understanding of its operation is useful in analyzing the impact of the proposed regulatory changes. Conceptually, the train air brake system has three major parts—(1) A signal sender, (2) a signal relay, and (3) a signal receiver/responder.

The *brake valve* on the locomotive is the signal sender. Operation of the valve permits air to be pumped into or released from the brake pipe. The pressure change resulting from the additional or reduced air supply in the brake pipe is the "signal".

The *brake pipe*, also known as the train air line, is the signal relay. It is the continuous air line running from the front of the train to the rear of the train. The continuity of the air line from car-to-car is accomplished by means of flexible air hoses. The brake pipe is closed (sealed) at the rear of the train and pressurized so that, apart from air leakage in the system, changes in the brake pipe pressure are made through operation of the brake valve on the locomotive.

When the engineer on a locomotive "sets the brakes", air is released from the brake pipe through the locomotive brake valve. This release of air reduces the pressure of the brake pipe (the signal), beginning at the front of the train. The pressure reduction moves down the brake pipe (propagates) to the rear of the train. Thus, the signal (pressure reduction) is relayed by the brake pipe to entire train. Similarly, when the brakes are released, the locomotive brake valve is positioned so that air is pumped into the brake pipe, sending a pressure increase through the brake pipe. A pressure reduction in the brake pipe rather than a pressure increase initiates a brake application. Thus, the train air brake system is said to be "failsafe". For example, if an air

hose bursts, the resulting loss of air pressure in the brake pipe will initiate a brake application.

The changes in the brake pipe pressure are received and interpreted by valves located on each car. These *signal receiving valves* initiate the application or release of the brakes on each individual car. The degree of braking effort is determined by the degree of the brake pipe pressure drop, generally described as a partial service reduction, a full service reduction, or an emergency application.

The individual car air brake system is also complex and varies from car-to-car depending upon the features of each car's brake system. An individual car air brake system has several major components: (1) A signal receiving/responding valve (actually a series of valves); (2) air reservoirs (auxiliary and emergency); (3) brake cylinder(s); (4) brake rigging; and (5) brake beam and shoes. When a brake application signal is received by the signal receiving valve, the valve causes air to be transferred from the air reservoir(s) to the brake cylinder. (Whether air is transferred from both reservoirs or only the auxiliary reservoir is a function of the degree of the brake pipe pressure reduction.) The pressure of the transferred air causes the piston in the brake cylinder to move. The piston pushes the brake rigging (a series of rods and levers designed to increase the braking ratio) which moves the brake beam. The brake beam pushes the brake shoe against the wheel causing the braking action. (Truck mounted brakes and certain other types of brakes operate somewhat differently; the differences are not pertinent to this analysis or the proposed changes to the rule.)

Although a pressure reduction in the brake pipe signals a brake application, stored air under pressure from the air reservoirs is necessary to actually apply the brakes to stop the train. The brake pipe, which is pressurized, supplies air to the car reservoirs. The process of filling the reservoirs on each of the cars in a train is called "charging the train". The train is charged before it is tested. It takes about six minutes to charge a single car if the car air reservoir are empty and the air pressure is being generated by an air compressor on a locomotive. However, numerous cars can be charged at the same time. Thus, a fifty car train can be charged in approximately twenty minutes.

There is a limit to the number of brake applications that can be made in a short period of time. This is true because each application reduces the air in the reservoirs, and some time must elapse

before the reservoirs are recharged. Thus, several brake applications in a short time interval can sharply reduce the braking effectiveness of the system.

Background on the Initial Terminal Road Train Air Brake Tests and the Road Train and Intermediate Terminal Train Air Brake Tests

The cornerstone of the test procedures involving power brakes is the initial terminal test. This test or inspection procedure is designed to ensure that the train air brake system and each individual car's air brake system are operating properly. Indeed, there is agreement by all knowledgeable groups, including rail labor and rail management, that a good initial terminal inspection is vital to the safe operation of trains. The effectiveness of this test is the basis for proposing to relax or eliminate other current requirements.

The test procedure is detailed in 49 CFR 232.12, and involves several different aspects. First, the train must be charged and the angle cocks (train line continuity) and cutout cocks (individual car brake system) properly positioned. The condition of the air hose must be checked and system leakage must be reduced to a minimum (49 CFR 232.12(c)). This aspect of the procedure ensures, among other things, that leakage from any single source in the train is not substantial. A large single source of leakage could send an unintended pressure reduction signal through the brake pipe or disrupt a desired signal from the brake valve.

Second, a brake pipe leakage test is made. After the system is charged to the prescribed minimum air pressure measured at the rear of the train, a 15 pound brake pipe service reduction is made in automatic brake operation. The brake valve is then closed (lapped), thus "sealing" the system. Leakage is determined by visual inspection of the brake pipe gauge for one minute. The gauge reflects changes in brake pipe (train line) pressure resulting from leakage (49 CFR 232.12(d)). Brake pipe leakage may not exceed five pounds per minute (49 CFR 232.12(e)).

The leakage test serves several safety functions. It ensures that the total brake pipe leakage is limited in amount and that signals will be transmitted (propagated) through the train line. It also provides evidence that the train is properly charged, i.e., that the air reservoirs on the individual cars are pressurized with air. This is true because leakage would be excessive (over five pounds per minute) if air were being taken from the brake pipe to charge individual car air reservoirs.

The third aspect of the initial terminal test requires a car-by-car inspection to determine that the brakes apply on each car and that the brake rigging does not bind or foul (49 CFR 232.12(d)). After a signal to release the brakes, it must be determined that the brakes actually release on each car. Thus, the condition of the brakes on each car must be observed, both from the standpoint of the mechanical operation (brake rigging) and from the standpoint of the operation of the valves that apply and release the brakes under normal braking (service reduction). Because the brakes must apply and release on every car in the train, including the last car, train line continuity is assured. Visually checking that the brakes release on each car prevents a train leaving an initial terminal with "stuck brakes."

Fourth, as part of the car-by-car inspection, the piston travel of each brake cylinder must be observed. In the case of body mounted brake cylinders with a 12-inch stroke, piston travel must be adjusted to nominally 7 inches if the piston travel is less than 7 inches or more than 9 inches (49 CFR 232.12(f)). The piston travel adjustment requirement prevents excessive piston travel resulting from brake shoe wear during the trip. The current maximum permissible piston travel for a brake cylinder with a 12 inch stroke is 10 inches. Thus, if the piston travel adjustments are made to cars that have piston travel in excess of 9 inches, each car in the train will have 1 to 3 inches of remaining piston travel before the current 10 inch maximum is reached.

The initial terminal test is a comprehensive and time-consuming procedure. It verifies the basic integrity of the train air line, the train brake system as a whole, and the basic functional capability of the individual air brake system on each car in the train. The initial terminal test is the critical test that ensures the effectiveness of the train air brake system. The other train brake air tests are essentially derivative and are designed to deal with specific events that potentially undermine the previously determined effectiveness of the train air system. These "events" are outlined and the test procedures briefly discussed in the next section.

Road Train and Intermediate Terminal Train Air Brake Tests

Many of the events that cause interruption to the brake pipe continuity are easily anticipated. First, a locomotive or group of locomotives (locomotive consist) may be detached from a train for refueling or servicing and then returned. Section 232.13(b)

provides that the train brakes must be applied before the locomotive is uncoupled. After the locomotive is recoupled to the train and the angle cocks reopened, it must be known that air is being restored, as indicated by the caboose gauge, and that the brakes on the rear car are released.

These abbreviated procedures are appropriate to the limited nature of the interruption to the train air brake system. The critical concern resulting from the interruption is whether train line continuity is restored. Restoration of air at the rear of the train is evidence that there is continuity. The requirement that the brakes on the rear car release also assures that the signal to release sent by the locomotive brake valve has been received and implemented by the rear car of the train.

Since the cars in the train are not directly affected by this "event", no additional inspection of the train is warranted or required. Similar abbreviated procedures are followed where a locomotive or caboose is changed or where one or more consecutive cars are cut off from the rear end or the head end of train with the train otherwise remaining intact (49 CFR 232.13(c)).

Another specific "event" occurs when cars are added to a train enroute. When cars are added at a point other than a terminal, a leakage test is required. This assures that the added cars have not introduced leakage to the train air brake system which would impair its effectiveness. In addition, it must be known that the brakes apply and release on each added car and on the rear car of the train. This assures train line continuity, the absence of stuck brakes on the added cars, and the ability of the brakes on each added car to apply. Finally, it must be known that air is being restored at the end of the train (49 CFR 232.13(d)(1)).

Thus, something close to an initial terminal test is required for those cars added to a train. Even so, cars which have not been fully inspected as prescribed for an initial terminal test must be so inspected and tested at the next terminal where facilities are available. Hence, a thorough inspection of the brake rigging, piston travel, and air hoses is ultimately required for cars added enroute.

If the added cars are put into the train at a terminal where they have been previously charged and tested according to the initial terminal test procedures, these pretested cars can be added subject only to the requirement to set and release the brakes on the rear car and know that air is being restored at

the rear of the train. This requirement assures train line continuity. (There are different test procedures for transfer train and yard train movements not exceeding 20 miles. These limited movements are not pertinent to this analysis or the proposed changes.)

It is apparent from the analysis of these current air brake test requirements that mandating test procedures which reduplicate all or part of the initial terminal test should be based on objective events that interrupt or disturb the train air brake system. It is also apparent that the degree of reduplication should be based on the degree of interruption to the system. These premises, together with the preceding background information on the operation of the entire train air brake system, provide a basis of reevaluating the safety significance of the other required train test procedures.

Interchange Inspection

The interchange test (49 CFR 232.212(a)(3)) requires a complete reinspection of the train, utilizing the comprehensive initial terminal test procedures, at every interchange point. The "event" giving rise to the requirement is a change in ownership of the right of way, which has no direct impact on the integrity of the train air brake system or any individual car's air brake system. The test is required solely because of corporate boundaries and for historical reasons. In certain situations, joint trackage agreements have eliminated the basis for requirement, i.e., an interchange. Also, rail mergers have eliminated many other instances where interchange tests had previously been required. However, it is not uncommon for a train to receive an interchange test after a relatively short distance (less than 100 miles).

The revised rule provides that a solid block of cars may be removed from the head end or the rear end of the train, that motive power can be changed, that the caboose may be removed or changed, or that any combination of the preceding events may take place at interchange without giving rise to a requirement to repeat the initial terminal test procedures. However, these events will give rise to a requirement for the appropriate intermediate terminal air brake test. Changes in the train consist beyond those specified will give rise to the requirement for an initial terminal air brake test at interchange.

There is no logical or empirically demonstrable basis for the current interchange test as a necessary safety standard. Without the interchange test, any event occurring at interchange that

interrupts the brake pipe will automatically invoke the test procedure appropriate for the interruption. If cars are added or removed, if the locomotive is changed, or if the entire train is broken up, the remaining test requirements in Part 232 address the safety need. If no change in the makeup of the train is made, then no additional procedures are warranted. This last proposition is the basis for the current run-through train provisions in 49 CFR § 232.19, which permits a train to go through an interchange point without an interchange inspection under specified conditions. The key condition of those provisions is that no change in the makeup of the train is permitted other than the addition or removal of a block of cars.

The traditional rationale for the interchange inspection was that it allows the receiving carrier to determine whether the cars being received are in compliance with the applicable statutory and regulatory requirements. However, the carrier is in the best position to determine what steps, if any, it believes are necessary at each interchange point to identify non-complying cars. Under the Safety Appliance Acts, there is absolute liability against the carrier for moving any car with a power brake defect, unless it is being moved for repair under very narrowly prescribed conditions. Hence, elimination of the requirement for an interchange test would not prevent FRA safety enforcement activities.

However, in order to avoid confusion regarding what events disrupting the brake pipe give rise to which requirements for air brake inspections at interchange, FRA is not proposing to delete the current language about interchange tests. Rather, FRA is adding language specifying what changes in the train consist may be made without requiring an initial terminal air brake test at the interchange.

Piston Travel Requirements

Section 232.11(c) of the current rule provides that air brakes cannot be considered in effective condition when piston travel is in excess of 10 inches (for a 12 inch brake cylinder). Although the term "effective condition" is not defined in the rule, the concept behind the provision is that a maximum permissible piston travel limit, as determined in a static test such as the initial terminal test, is necessary to ensure that the brakes will apply effectively under operating (dynamic) conditions.

FRA has analyzed the 10-inch limit and has concluded that increasing the

limit to 10½ inches would not significantly diminish the braking effort and, thus, would not adversely affect safety.

FRA's analysis begins with a determination of the theoretical point at which the brakes cease to apply with sufficient force against the wheel under static conditions; it then considers the consequences of dynamic forces.

From a theoretical perspective, a brake cylinder with a 12-inch piston will remain fully effective until the piston is fully extended (12 inches). This is true because the brake cylinder pressure is relatively constant even as the piston is pushed out (less than 10% change in pressure from 7 inches to 12 inches of piston travel) and the leverage action of the brake rigging is likewise relatively constant for the full range of piston travel. (In fact, the brake will still apply after the piston is fully extended because of the resiliency of the brake rigging at the point the piston can travel no further.)

Piston travel, of course, can be measured by a person only when the car is not moving. Piston travel on a moving car is longer than on a stationary car and, thus, the static test piston travel limit needs to be less than the theoretical maximum of 12 inches. The longer piston travel results from the jostling that the brake rigging is subject to when the car is in the motion. Piston travel may also be affected by the curvature of the track and other factors. The degree of dynamic effect varies from car to car based on car condition, car design, and type of brakes. While there is no agreement on a single figure, FRA believes, based on the available research, that one-half inch is the approximate average amount of additional travel resulting from the dynamic effects.

There is also additional piston travel that results in an emergency application of the brakes because of the higher pressures involved. (Piston measurement is made during a service reduction at the initial terminal test.) The additional piston travel resulting from an emergency application is approximately $\frac{1}{8}$ inch. Hence, approximately $\frac{1}{8}$ inch of piston travel is "lost" due to the dynamic factor. This loss should be taken into account to ensure the full availability of the braking effort in an emergency brake application. It should be recognized, however, that the theoretical limit is based on the overall car fleet. For example, some individual cars that have 11 inches of piston travel during a static service brake application may not have the full additional braking effort in a dynamic emergency application. Hence,

FRA is only proposing an extension to 10½ inches. This limit provides full braking effectiveness even for the typical worst case situation for individual cars. It also provides a substantial margin of safety for the car fleet viewed as a whole.

The foregoing analysis of the piston travel issues applies to less than one third of the fleet of cars and the portion is declining. Approximately seventy percent of rail cars are equipped with either truck mounted brakes or automatic slack adjusters and all new cars with body mounted brakes are equipped with automatic slack adjusters. For cars with these components, the maximum piston travel limit is not a major issue. (It would have an occasional impact, for example, when the automatic slack adjuster is defective.) Indeed, the safety significance of the proposed 10½ inch limit appears to be totally inconsequential since piston travel must be adjusted at the initial terminal test. Since no car may leave an initial terminal with more than 9 inches of piston travel, it should be quite rare for a car to reach or even come close to the 10½ inch limit if the initial terminal test is properly made. FRA intends to strictly enforce the initial terminal test requirements relating to piston travel adjustment.

500 Mile Test

The 500 mile test is prescribed in 49 CFR 232.12(b). The test procedure requires a leakage test, an inspection of the brake rigging on each car, and an inspection to determine that brakes apply on each car. While less comprehensive than an initial terminal test, it is nevertheless a costly and time consuming procedure since the train must be traversed from end to end to inspect every car.

The "event" that gives rise to this test is train operation to a given mileage limit—500 miles. As an event, mileage is not *prima facie* a totally arbitrary inspection criterion as in a change in corporate boundaries. However, the passage of 500 miles does not signal any special impact on the train air brake system. What is necessary is an analysis of the impact of mileage generally on the effectiveness and integrity of the train air brake system and the reasonableness of the absolute mileage limit. What things happen as a result of mileage? What are the consequences, from a safety standpoint, of those things happening? What is special about 500 miles as an interval in relationship to those things? Will those things that are possible safety concerns

be identified and corrected at the 500 mile inspection?

There are four possible problem areas: (1) car valve failure; (2) brake rigging failure (binding); (3) excessive leakage; and (4) excessive piston travel. Joint FRA/AAR tests have indicated that the likelihood of an enroute car valve failure is minimal if the valve operated properly in applying and releasing the brakes at the initial terminal test. This is true of trips which are substantially longer than 500 miles. Moreover, the failure of the car valve will usually affect only the individual car. An occasional car with brakes that do not apply as a result of an enroute car valve failure is not a safety hazard since it is recognized that this does not significantly impair the train brake system.

The situation with brake rigging is somewhat similar. If brake rigging failure on a car affects only the application of the brakes on that car, as it usually does, then the problem is not major. The critical failure mode is dragging brake rigging that can result in a derailment. But as with the car valve, the possibility of brake rigging failure of any type is remote if a proper initial terminal test is made. Moreover, dragging brake rigging is discernable by wayside inspections and detectors and is not directly linked to the 500 mile inspection interval. There is no evidence, for example, that the likelihood of a brake rigging related derailment occurring on a 1000 mile trip without a 500 mile inspection is greater than the likelihood of a derailment on the same 1000 mile trip with a 500 mile inspection.

The third potential problem area, excessive air brake system leakage, does not argue for retention of the 500 mile test. This is true for several reasons. First, if the system has minimal leakage at the initial terminal test, there is no reason to believe that it will have an unacceptable level of leakage during a train trip of up to 1000 miles as compared to a trip of 500 miles. There is nothing inherent in additional train mileage that results in a progressive increase in leakage. It is not like, for example, wear on an automobile tire that is directly related to mileage.

Second, significant additional leakage enroute is generally caused by a traumatic occurrence, not by mileage. The likelihood of such an event occurring on a lengthy trip is no greater than the likelihood of the event occurring on two successive 500 mile segments.

Third, it is likely that a leakage test will be made enroute to satisfy other test requirements. Any time cars are added to a train, unless they have been

pretested, a leakage test must be made [49 CFR 232.13(d)].

Fourth, leakage problems can often be detected enroute. If the locomotive of a train is equipped with an air flow meter, the meter will indicate the amount of air being pumped into the brake pipe to maintain a constant pressure. An excessive amount indicates a leakage problem. If the locomotive is not equipped with that device, an engineer can sometimes detect excessive leakage by the way the train handles and, in situations of extremely large leakage, by utilizing the regular air gauges.

The last area where mileage may have an impact on the train air brake system is piston travel. As previously discussed, the maximum piston travel of body mounted 12-inch brake cylinders can be safely extended from 10 to 10½ inches. The FRA has concluded that the current 500 mile limit is not necessary to ensure that the piston travel on individual cars will not exceed 10½ during the train movement.

There are approximately 1.7 million railroad cars in the United States, of which about 1.2 million (70%) are equipped with either truck mounted brakes or automatic slack adjusters. Cars equipped with operative automatic slack adjusters or truck mounted brakes do not routinely require any piston travel adjustment. Hence, we are dealing with a small, but significant portion of the fleet that requires piston travel adjustment. The portion is declining since the AAR requires new construction cars with body mounted brakes to be equipped with automatic slack adjusters.

However, even for the non-equipped cars, a worst case set of assumptions does not indicate a need for the 500 mile test. Assuming that an entire train was comprised of cars not equipped with automatic slack adjusters, and assuming that all of the cars had 9 inches of piston travel at the initial terminal test (cars with over 9 inches would have to be adjusted back to 7 inches), there would still be at least 1½ inches of remaining piston travel before the 10½ inch maximum is reached. This 1½ inches of piston travel translates to well over 1,000 miles of train operation even if metal shoes, which wear faster than composition shoes, are being utilized.

The mileage figure is based on AAR testimony at the Power Brake Safety Inquiry in 1978 that approximately $\frac{3}{32}$ inch of metal shoe wear is normal per thousand miles. This figure is multiplied by the braking ratio because the brake rigging on the car accentuates the impact of shoe wear on piston travel. The ratio selected is eight, since that is

typical of most of the relevant car designs.

The view that the 500 mile test can be extended is supported by Canadian experience. In Canada, a railroad may undertake a train movement of any distance after an initial terminal test is made. It should be noted, however, that precise comparison with Canadian experience is not possible since other aspects of rail operations differ.

The conclusion of FRA's analysis is that the 500 mile test can be extended to 1000 miles without any reduction in safety. Further extension may be appropriate if actual experience over the next several years so indicates.

Initial Terminal Test Procedure

As indicated previously, the initial terminal air brake test and inspection is the critical procedure that ensures the effectiveness of the brake system. In addition, it also assures the road train engineer and crew that the train is safe to operate. In order to raise the confidence level that the test has been performed, and performed in a satisfactory manner, FRA agrees with the AAR and RLEA proposal to specify that the test be made by a qualified person and to require that the engineer be notified that the test has been properly performed.

Hence, the proposed rule requires that the initial terminal test be made by a person determined by the inspecting railroad to be qualified. It also requires that the engineer be notified that the test has been satisfactorily performed by a qualified person participating in the test or who has knowledge that the test has been made. The notice shall be in writing if the train will move excess of 500 miles without being subjected to another test pursuant to §232.12 or §232.13. It shall also be in writing when the road engineer will report for duty after the qualified person participating in the test goes off duty. The written notifications shall be made by a qualified person participating in the test.

Single Car Test

Section 232.17(a) specifies requirements for testing and repairing brakes on cars while on shop or repair tracks. One requirement applicable to freight cars in paragraph (a)(i) is that the brake equipment on a car is to be tested using a single testing device unless the car has received a single car test within the last 90 days. This requirement generally is referred to as the "in-date test" or IDT.

The IDT is a time related test requirement rather than one that arises as a result of an identified brake defect.

While it can be said to be a screening mechanism to detect brake equipment problems, the IDT does not have the direct safety link of other brake tests. The requirement of the initial terminal test that the brakes on each car apply and release provides a predeparture check of the functioning of the brake equipment.

Hence, FRA proposes to delete the requirement for a single car test based on the date of the last test (IDT). However, under the proposed rule a single car test would be required when a car is on the shop or repair track because of an air brake defect and when the brake equipment is due for periodic attention under § 232.17. The periodic attention, commonly known as "COT&S", is required every 8 to 16 years depending on the type of air brake equipment on the car. In addition, the proposed rule would require that all freight cars on a shop or repair track be inspected to determine that the brakes apply and release, and that piston travel be adjusted to within the prescribed limits.

FRA Enforcement Posture

IN the past the FRA has recognized the critical importance of the initial terminal air brake test and inspection as a means of achieving railroad safety. At numerous hearings on proposed waivers or changes in the Power Brake Rules, witnesses have affirmed the necessity of a proper initial terminal air brake test. Likewise, FRA's existing penalty schedule for violations of the Power Brake Rules (Appendix A to 49 CFR Part 209) states that the failure to fully and adequately perform an initial terminal air brake inspection indicates a serious lack of safety procedures and that for each failure FRA will seek to impose not the ordinary penalty of \$1,000 but the maximum penalty of \$2,500.

The industry itself, including both management and labor, also agrees that the initial terminal air brake test is essential for safety. Industry testimony at FRA hearings has repeatedly emphasized the importance of the initial terminal air brake test. That recognition was reaffirmed in the letter to the FRA Administrator dated November 6, 1981, co-signed by the Chairman of the Safety Committee of the Railway Labor Executives' Association and the President of the Association of American Railroads, recommending that the initial terminal air brake test provisions be strengthened.

FRA reaffirms the overriding importance of the initial air brake test as the foundation of power brake safety. This test would gain greater importance than in the past if FRA's proposals are

adopted to extend the 500-mile inspection to 1000 miles, revise the interchange inspection requirement, and relax certain other requirements. FRA intends to vigorously enforce the initial terminal air brake provision. Violations of this provision will be cited, at the discretion of the FRA field inspector, without prior notice to the carrier and without regard to whether the carrier properly performs the test after being notified by the inspector.

Because of the great safety value of the initial terminal air brake test, penalty assessments for violations of the Power Brake Rules requiring an initial terminal air brake test will not be compromised pursuant to the Federal Claims Collection Act, except in compelling circumstances and insofar as they involve significant litigative risks. It is the intention of the FRA to secure full compliance with all of the prescribed initial terminal air brake test procedures and to use the full panoply of its legal remedies, including injunctions and emergency orders, to achieve that necessary result.

Accident History and Technological Change

The conclusion that several requirements of the current power brake regulations can be modified or eliminated while maintaining the same level of safety is supported by an analysis of the accident history relating to power brake failures and a review of the major technological changes or improvements since 1958.

A trend analysis of accidents caused by equipment-related brake failures shows a marked decline over the past five years. The annual rate of decline for mechanical failures is 5.4 percent using a least-square regression method over a 5 year period. Accidents involving human-error show an annual increase of 3.9 percent. The annual rates applied over the entire five year period show a 24.1 percent decline in accidents due to mechanical failure and a 21.1 percent increase in accidents due to human error. These trends suggests that equipment quality has been improving and contributing to a reduction in brake-caused accidents, while the greater need is in the area of reducing human-error accidents.

In absolute terms, the number of accidents caused by equipment-related brake failures is very small, although the ultimate goal is to eliminate all accidents. According to FRA railroad accident statistics, a total of 8,451 train accidents (other than grade crossing accidents) occurred in 1980, resulting in 29 fatalities and 665 injuries. Of this total, equipment-related brake failures

caused 187 accidents (2.2%), resulting in no fatalities and 15 injuries (2.3%).

During the five year period 1976-1980, a total of 50,078 train accidents (other than grade crossing accidents) occurred, resulting in 165 fatalities and 5,114 injuries. Of this total, brake failures caused only 1,168 train accidents (2.3%) resulting in no fatalities and 62 injuries (1.2%). (One fatality in 1977 was reported to FRA as resulting from a "brake valve malfunction, undesired emergency." However, FRA has concluded that the primary cause of the fatality was not related to a power brake failure.)

Both the accident trend and the limited number of accidents caused by equipment-related brake failures suggest that lessening the regulatory burden is possible while maintaining, or even improving safety. This is especially true if the particular brake failures that cause accidents are not likely to increase as a result of the regulatory changes that reduce the burden. An analysis of equipment-related brake failures indicates that most are caused by conditions that are discoverable before a train departs its initial terminal. The conditions that are not discoverable at the initial terminal or intermediate terminal inspection would likewise not be discoverable at the inspections proposed to be revised, i.e., the 500 mile inspection and the interchange inspection. The conditions that are discoverable in most instances during an initial terminal inspection include: air hose uncoupled or burst; broken brake pipe or connections; obstructed brake pipe, e.g., closed angle cock; other brake components damaged, worn, broken or disconnected; brake valve malfunction; undesired emergency brake application; brake valve malfunction, e.g., stuck brakes; rigging down or dragging; handbrake broken or defective; and handbrake linkage or connections broken or defective.

From the standpoint of the conditions occurring enroute, for the most part, the likelihood of their occurring is either fairly remote or the conditions would be detected in any event, e.g., uncoupled or burst air hose and broken brake pipe or connection would probably cause the train brakes to apply in an emergency application. In sum, the accident analysis does not lead to a conclusion that either the 500 mile inspection or the interchange inspection needs to be retained in their present form, although it does demonstrate the importance of the initial terminal and other intermediate terminal inspections.

Technological Change

FRA believes that the major reason that equipment-related power brake accidents are so few and are declining in number is technological improvement. An outline of the major improvements in brake equipment since adoption of the current rules in 1958 and the contribution those improvements make to the overall brake system is set forth below. The conclusion to be drawn is simply that the total train brake system in 1981 is vastly superior to the system in 1958. Moreover, the system will continue to improve not only as new new technology is developed, but because the AAR requires many of the improvements to be installed on new construction cars, e.g., the ABD brake valve and automatic slack adjusters.

Major Improvements in Brake Equipment Since 1958

1. Dynamic Braking:
 - Supplements the air brake system
 - Electrically converts power developed by the locomotive momentum into an effective retarding force
 - Improves train handling performance by controlling train speed on descending grades and during slow downs and stops
 - Controls slacks; gives smoother braking performance
 - Reduces wear on brake equipment during long grade brake applications, thus reducing chance of derailment from thermal crack failures in wheels
2. ABD and ABDW Brakes Valves:
 - Decrease stopping distances via quicker brake application and release
 - Reduce number of train separations and derailments caused by sticking brakes
 - Mandatory on new equipment
 - Over 50% of fleet now equipped
3. Composition Brake Shoe:
 - Decreases stopping distance of train
 - Smoother brake application; greatly reduces grabbing and sliding of wheels
 - Causes less wear on wheel, thus reducing probability of derailments resulting from cracked wheels
 - Extends brake shoe life, thus reducing probability of accidents resulting from brake shoe failures
 - Over 50% of fleet now equipped
4. Empty-Load Brake Device:
 - Senses difference in weight of loaded versus empty car
 - Prevents over application of brakes, thus preventing locking and sliding of wheels
5. Truck Mounted Brake Cylinders:
 - Increase control of train slack
 - Provide for shorter braking distances and smoother stopping

- Reduce possibility of brake failure because of redundant brake piston cylinders
- Over 13% of fleet equipped

6. Double-Acting Automatic Slack Adjustors:
 - Improve train handling performance by controlling slack
 - Improve braking efficiency through more consistent piston travel
 - Adjust brake rigging to compensate for wear of brake shoes, wheels, pins, levers, etc.
 - Mandatory on new equipment with body mounted brakes
 - Over 60% of fleet now equipped
7. Locomotive Main Reservoir Air Supply Systems:
 - Improved air compressors
 - Improved air filtering systems
 - Improved automatic drain valve equipment
 - Improved moisture separators
 - Improved quality and quantity of air in brake system reduces chance of accidents due to brake system failure
8. Pressure Maintaining 26-L Brake Control Valve (Locomotive):
 - Compensates for brake pipe and brake system leakage
 - Increases ability to maintain degree of brake application
 - Increases smoothness of brake application, thus preventing locked and sliding wheels
 - Over 50% locomotive fleet now equipped
9. Welded Brake Pipes and Improved Angle Cocks:
 - Greatly reduce brake pipe leakage
 - Decrease number of brake failures resulting from leakage
10. Improved Air Hose:
 - Improved materials and clamps decrease amount of brake system leakage
 - Standard hose lengths and improved couplings decrease possibility of hose connections being pulled apart in service
 - Decreased number of brake failures due to system leakage and loss of air pressure

In addition to improvements in the air brake system, other improvements in rail equipment and track also have improved the safety of railroad operations. These improvements include welded rail, use of roller bearings, low carbon steel wheels, and wayside detectors.

Impact of the Proposed Changes

It is FRA's view that the changes in the current requirements proposed in this notice are consistent with operating safety and are justified by the accident

history and improvements to the air brake system. Indeed, train operations in 1981 under the proposed less burdensome regulatory scheme would be safer than train operations in 1958 under the existing rules. Finally, the elimination of unnecessary regulation has the potential to improve railroad safety in two ways. First, the money saved will be available for other railroad safety related activities, e.g., improving track conditions. Second, elimination of unnecessary regulations helps focus industry and FRA attention on the necessary remaining requirements.

Environmental Impact

On June 16, 1980, the FRA published (45 FR 40854) revised procedures for ensuring full consideration of the environmental impacts of FRA actions as required by the National Environmental Policy Act ("NEPA", 42 U.S.C. 4321 *et seq.*), the Department of Transportation Act (49 U.S.C. 1651 *et seq.*), other environmental statutes, executive orders, and DOT Order 5610.1C.

These FRA procedures require that an "environmental assessment" be performed prior to all major FRA actions. The procedures categorically exempt certain actions from the requirement for an environmental assessment because they are not major actions. The exemptions include technical or minor amendments to regulations and FRA actions concerning maintenance (normally periodic care) of existing railroad equipment. In this case, the proposed revision of Part 232 involves power brake inspection requirements that are related to the normal periodic testing and care of the air brake system.

The FRA environmental procedures also contain a provision that enumerates seven criteria which, if met, demonstrate that a non-categorically exempt action is not a "major" action for environmental purposes. These criteria involve diverse factors, including the availability of adequate relocation housing; the possible inconsistency of the action with Federal, State, or local law; the possible adverse impact on natural, cultural, recreational, or scenic environments; the use of properties covered by §4(f) of the DOT Act; and the possible increase in traffic congestion. The proposed revision of the power brake inspection requirements meets the seven criteria that establish an action as a non-major action.

For the reasons above, the FRA has determined that the proposed amendments of Part 232, power brake

inspection requirements, do not constitute a major FRA action requiring an environmental assessment.

Economic Impact

FRA has reviewed this notice under the standards established by Executive Order 12291. Preliminary data indicates that the cost saving to the rail industry of the proposed changes could be in excess of \$100 million on an annual basis. Hence, FRA has determined that it is a major proposed rule. However, FRA has not prepared a complete Regulatory Impact Analysis because the Office of Management and Budget has granted a waiver of the requirements of Executive Order 12291.

This notice has been reviewed according to the requirements of the Regulatory Flexibility Act (Pub. L. 95-354, 94 Stat. 1184, September 19, 1980). FRA has not identified any significant economic impact from the proposed rule changes that will affect small entities. The basis for this conclusion was reached after reviewing recent power brake studies, contacting railroad industry representatives, and studying the 1978 safety inquiry docket on power brakes. The recommended rule changes primarily benefit carriers having annual operating revenues over \$50 million. Small entity impacts will be indirect. No measureable impact on small businesses supplying materials or services to the groups directly affected has been forecasted. Based on these facts, it is certified that the proposal will not have a significant economic impact on a substantial number of small entities under the provisions of the Regulatory Flexibility Act.

Written Comments and Hearing

Interested persons are invited to participate in this proceeding by submitting written data, views, or comments. Communications should identify the regulatory docket number and the notice number, and must be submitted in triplicate to the Docket Clerk, Office of the Chief Counsel, Federal Railroad Administration, 400 Seventh Street SW., Washington, D.C. 20590. Communications received before March 22, 1982, will be considered before final action is taken on the proposed rules. All comments received will be available for examination by interested persons at any time during regular working hours in Room 7321A Nassif Building, 400 Seventh Street SW., Washington, D.C. 20590.

In addition, the FRA will conduct a public hearing at 10:00 a.m. on March 17, 1982, in Room 2230, Nassif Building, 400 Seventh Street, SW., Washington, D.C. The hearing will be informal, and not a

judicial hearing. It will be conducted in accordance with FRA's published rules of practice in 49 CFR Part 211. The purpose of the hearing is to provide FRA with information that will assist in making final decisions regarding the proposed revisions.

A staff member of FRA will make an opening statement outlining the matter set for the hearing. Interested persons will then have the opportunity to present their oral statements. At the conclusion of all statements, each person will be permitted to make an additional comment or, if deemed appropriate by that person, a rebuttal statement. These rebuttal statements will be made in the same order in which the original statements were made.

The FRA hearing panel may ask questions of the persons making statements. In addition, the hearing officer will receive questions from persons attending the hearing that they wish to be asked of a person making a statement. The hearing officer will pose, as appropriate, the questions so received.

The proposals contained in this notice may be changed in light of the oral statements made at the public hearing, or the written comments submitted in response to this notice.

The Proposed Rule

PART 232—RAILROAD POWER BRAKES AND DRAWBARS

In consideration of the foregoing, the FRA proposes the following:

1. To revise 49 CFR 232.11(c) to read as follows:

§ 232.11 Train air brake system tests.

(c) Each train must have the air brakes in effective operating condition, and at no time shall the number and location of operative air brakes be less than permitted by Federal requirements. When piston travel is in excess of 10½ inches, the air brakes cannot be considered in effective operating condition.

2. To revise 49 CFR 232.12 to read as follows:

§ 232.12 Initial terminal road train air brake tests.

(a)(1) Each train must be inspected and tested as specified in this section by a person determined to be qualified by the inspecting railroad at points—

(A) Where the train is originally made up (initial terminal); and

(B) Where train consist is changed, other than by adding or—removing a

solid block of cars, and the train brake system remains charged; and

(C) Where the train is received in interchange if the train consist is changed other than by—

(i) Removing a solid block of cars from the head end or rear end of the train;

(ii) Changing motive power;

(iii) Removing or changing the caboose; or

(iv) Any combination of the changes listed in (i), (ii), and (iii) of this subparagraph.

(2) A qualified person participating in the test and inspection or who has knowledge that it was made shall notify the engineer that the initial terminal road train air brake test has been satisfactorily performed. The qualified person shall provide the notification in writing if the road crew will report for duty after the qualified person goes off duty. The qualified person also shall provide the notification in writing if the train that has been inspected is to be moved in excess of 500 miles without being subjected to another test pursuant to either this section or § 232.13 of this part.

(b) Each carrier shall designate additional inspection points not more than 1000 miles apart where intermediate inspection will be made to determine that—

(1) Brake pipe pressure leakage does not exceed 5 pounds per minute;

(2) Brakes apply on each car in response to a 20-pound service brake pipe pressure reduction; and

(3) Brake rigging is properly secured and does not bind or foul.

* * * * *
3. To revise 49 CFR 232.17(a) to read as follows:

§ 232.17 Freight and passenger train car brakes.

(a) Testing and repairing brakes on cars while on shop or repair tracks.

(1) When a freight car having brake equipment due for periodic attention is on shop or repair tracks where facilities are available for making air brake repairs, brake equipment must be given attention in accordance with the requirements of the currently effective AAR Code of Rules for cars in interchange. Brake equipment shall then be tested by use of a single car testing device as prescribed by the currently effective AAR Code of Tests.

(2)(i) When a freight car having an air brake defect is on a shop or repair track, brake equipment must be tested by use of a single car testing device as prescribed by currently effective AAR Code of Tests. All freight cars on shop

or repair tracks shall be tested to determine if the air brakes apply and release. Piston travel must be adjusted to nominally 7 inches on all cars having standard single capacity brake. Piston travel of brake cylinders on all freight cars equipped with other than standard single capacity brake, must be adjusted as indicated on badge plate or stenciling on car located in a conspicuous place near brake cylinder. After piston travel has been adjusted and with brakes released, sufficient brake shoe clearance must be provided.

• • • •

§ 232.19 [Removed]

4. To remove 49 CFR 232.19 in its entirety.

(72 Stat. 86, 45 U.S.C. 9; sec. 6 (e), (f), 80 Stat. 939, 49 U.S.C. 1655; and 1.49(c) of the regulations of the Office of the Secretary of Transportation, 49 CFR 1.49(c))

Issued in Washington, D.C., on February 11, 1982.

Robert W. Blanchette,
Administrator.

[FR Doc. 82-4296 Filed 2-17-82; 8:45 am]

BILLING CODE 4910-06-M

National Highway Traffic Safety Administration

49 CFR Part 571

[Docket No. 82-01; Notice 1]

Evaluation Report on Head Restraints; Request for Public Comment

AGENCY: National Highway Traffic Safety Administration (NHTSA), DOT.

ACTION: Request for public comments on evaluation report.

SUMMARY: This notice announces the publication by NHTSA of an Evaluation Report concerning Safety Standard No. 202, *Head Restraints*. This staff report evaluates the effectiveness and costs of head restraints in current passenger cars. The purpose of a head restraint is to prevent whiplash injury of the neck in rear impact crashes. The report was developed in response to Executive Order 12291, which provides for government-wide review of existing major Federal regulations. The NHTSA seeks public review and comment on this evaluation, as well as additional information on certain issues addressed by the report. Comments received will be used to complete the review required by Executive Order 12291 and as a basis for possible future rulemaking on head restraints.

DATE: Deadline for submission is April 19, 1982.

ADDRESSES: Interested persons may obtain a copy of the report free of charge by contacting Mr. Robert Hornick, Office of Management Services, National Highway Traffic Safety Administration, Room 4423, 400 Seventh Street, S.W., Washington, D.C. 20590 (202-426-0874). All comments should refer to the docket number and notice number and be submitted to: Docket Section, Room 5109, Nassif Building, 400 Seventh Street, S.W., Washington, D.C., 20590. [Docket hours, 8:00 a.m.-4:00 p.m., Monday through Friday.]

FOR FURTHER INFORMATION CONTACT: Mr. Frank G. Ephraim, Director, Office of Program Evaluation, Plans and Programs, National Highway Traffic Safety Administration, Room 5212, 400 Seventh Street, S.W., Washington, D.C. 20590 (202-426-1574).

SUPPLEMENTARY INFORMATION: Safety Standard No. 202 (49 CFR 571.202) requires the installation of head restraints at the driver's and right front seating positions of passenger cars. It also sets height, width and strength requirements for the restraint. If an adjustable restraint is used to meet the standard, the height requirement need only be satisfied when the restraint is in the up position. The purpose of a head restraint is to limit rearward motion of the head in a rear impact crash, thereby preventing whiplash injury due to hyperextension of the neck. The standard became effective for passenger cars in January 1969.

Pursuant to Executive Order 12291, NHTSA recently conducted an evaluation of Standard No. 202 to determine the effectiveness of the technology selected by the manufacturers in terms of preventing injuries and to determine the costs of that technology to consumers. Under the executive order, agencies are to review existing regulations to determine whether the regulations are achieving the order's policy goals, i.e., achieving legislative goals effectively and efficiently and without imposing any unnecessary burdens on those affected.

The principal findings and conclusions of the report are the following:

- Both integral and adjustable head restraints significantly reduce the overall injury risk in rear impact crashes: integral restraints by approximately 17 percent; adjustable restraints by 10 percent.

- Head restraints are effective because they have been performing as intended: they support the neck and prevent hyperextension. This conclusion is based primarily on crash and

laboratory test results and is consistent with the overall effectiveness findings.

- The restraints do not appear to have had any unforeseen benefits, such as reducing rear impact fatalities, nonwhiplash injuries or forms of whiplash other than hyperextension.

- The restraints do not appear to have significant negative side effects, such as increasing rear impact fatalities, aggravating injuries to rear-seat occupants in frontal crashes of causing accidents because they block a driver's view of traffic to the sides and rear.

- Integral restraints are nearly twice as effective as adjustable head restraints because 75 percent of the latter are left in the down position by occupants—an adjustable head restraint in the down position does not adequately protect an occupant of average height.

- Integral restraints cost about one third as much as adjustable restraints: integral restraints add \$12 (in 1981 dollars) to the lifetime cost of owning and operating a car; adjustable restraints, \$40.

- Adjustable restraints, despite their higher cost and lower benefit, continue to be installed in the majority of cars. On most makes and models, the car purchaser is offered a choice of integral and adjustable restraints, the latter usually as part of an extra-cost seating option: in these circumstances, the majority of purchasers chooses the option which includes adjustable restraints. (The preference, of course, may in many cases be due to features of the deluxe seat option other than the adjustable restraints.) Customer preference for adjustable restraints seems to be motivated primarily by a perception that they are more stylish and comfortable than integral restraints. Vision obstructions experienced with integral restraints are an annoyance to short drivers (e.g., 5 feet 2 inches or less) but are less important than styling and comfort issues in the perception of most car purchasers. These conclusions are based on analyses of sales data, not an actual survey of car purchasers.

- The current mix of integral, correctly positioned and mispositioned adjustable restraints in cars on the road eliminates about 65,000 injuries per year.

- An all-integral restraint fleet would eliminate 85,000 injuries per year, at much lower cost.

- A similar gain in benefits, but without the cost-savings, could be achieved if all adjustable restraints were to measure at least 27.5 inches tall in the *down* position. (currently, Standard No. 202 only requires