

GAO

Report to the Chairman, Committee on  
Energy and Commerce, House of  
Representatives

March 1991

RAILROAD SAFETY

Weaknesses Exist in  
FRA's Enforcement  
Program



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**Resources, Community, and  
Economic Development Division**

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March 22, 1991

The Honorable John D. Dingell  
Chairman, Committee on Energy  
and Commerce  
House of Representatives

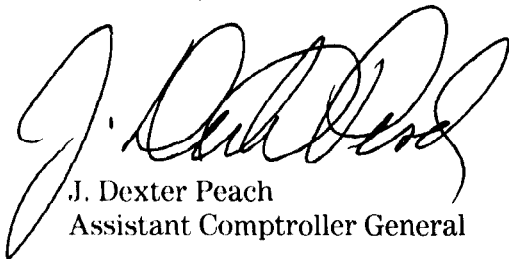
Dear Mr. Chairman:

In response to your request, this report examines the adequacy of the Federal Railroad Administration's (FRA) enforcement program. Specifically, it examines whether the program (1) encourages compliance with safety regulations; (2) is being properly implemented; and (3) is timely in reviewing, transmitting, and settling penalties.

As agreed with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of this letter. At that time, we will send copies to the Secretary of Transportation, the Administrator of the Federal Railroad Administration, and other interested parties. We will make copies available to others upon request.

Our work was performed under the direction of Kenneth M. Mead, Director, Transportation Issues, who can be reached at (202) 275-1000. Other major contributors to this report are listed in appendix I.

Sincerely yours,



J. Dexter Peach  
Assistant Comptroller General

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# Executive Summary

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## Purpose

Today, the nation's railroads operate over 1 million cars on more than 200,000 miles of track. Between 1985 and 1989, the Federal Railroad Administration (FRA) identified about 75,000 safety violations and assessed penalties totaling about \$29 million. Concerned about railroad safety, the Chairman, House Committee on Energy and Commerce, asked GAO to assess the effectiveness of FRA's safety program. This report, the sixth in a series, focuses on FRA's enforcement program. GAO determined whether the program (1) encourages railroads to comply with FRA's safety regulations; (2) is being uniformly implemented; and (3) is timely in reviewing, transmitting, and settling penalties. This report follows a July 1990 report on FRA's inspection program. Taken together, these reports assess the two components—inspection and enforcement—of FRA's safety program.

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## Background

As an agency of the Department of Transportation, FRA is responsible for establishing and enforcing safety regulations for the railroad industry. To carry out this responsibility, FRA has issued safety regulations covering track, signals, equipment, and operating practices. FRA periodically inspects railroads to determine whether they comply with the safety regulations. When inspectors find deviations from the regulations (defects), they notify the railroad that unsafe conditions exist and that corrective actions must be taken. FRA inspectors also recommend that railroads be assessed civil penalties when the inspectors believe that is the best way of obtaining compliance. The civil penalty is the cornerstone of FRA's enforcement program and is used more than any other enforcement tool. FRA's Office of Chief Counsel reviews civil penalties recommended by inspectors and determines whether a sufficient legal basis exists to impose the penalties. Upon notification, the railroads can challenge the inspectors' findings and the penalty amount. FRA attorneys meet with the railroads to agree on final settlement amounts. (See ch. 1.)

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## Results in Brief

FRA's enforcement program is not effective in ensuring that the nation's railroads comply with federal safety regulations. Over the past 5 years, FRA has found an increasing number of safety defects and violations despite an overall decline in railroad equipment, track, and employment. In addition, the same types of safety problems recurred, such as defective track that could lead to derailments, inadequate attention to operating rules and practices that could lead to accidents, and unsafe locomotives. Further, although FRA's policy is that inspectors should uniformly apply safety regulations, GAO found that the inspectors did not

do so. Finally, FRA does not review, transmit, and settle civil penalties in a timely manner. At the end of 1989, FRA took 36 months to settle civil penalties—16 months longer than in 1982 when GAO first examined the issue. One reason for the lengthy process is that FRA had a backlog of about 24,000 violations awaiting legal review and/or settlement.

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## Principal Findings

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### Enforcement Program Does Not Encourage Compliance With Safety Regulations

FRA's enforcement program is designed to encourage railroads to comply with safety regulations. GAO found that between January 1985 and December 1989 safety violations increased from about 289,770 to 390,000. Moreover, in 1989 FRA recommended civil penalties for only 17,700 of the 390,000 safety defects it identified, or 4.5 percent, as opposed to 2.9 percent in 1985. The increases in violations occurred when FRA's inspection work force and railroad employment, track, and equipment declined.

In addition, FRA repeatedly identified the same defects at the same railroads and throughout the railroad system. The violations included poor track inspection procedures and cracked or broken bars holding rail ends together that could lead to derailments, disregard of operating rules and practices that could lead to accidents, and ineffective locomotive inspection programs that allowed unsafe equipment to operate.

Further, when settling civil penalty cases, FRA attorneys do not review recent inspection data to determine the types of safety problems that occurred or factor such information into their negotiations with the railroads. As a result, the attorneys do not know whether the railroad is still experiencing the same types of safety problems as originally cited. Attorneys need this information in deciding how to settle the penalties and to put the railroads on notice that FRA expects them to be corrected. (See ch. 2.)

### Inspectors Are Not Uniformly Citing Railroads for Violations

Certain defects, such as ties so deteriorated that the gage exceeds the required 58 inches, should be cited as violations with civil penalties. FRA's policy is that uniform application of safety regulations is essential for an effective enforcement program. However, FRA gives its eight regional offices and about 360 inspectors discretion when enforcing safety regulations and standards. As a result, FRA did not uniformly take

enforcement actions against railroads with the same types of safety defects. GAO found, for example, that between January 1985 and December 1989 FRA did not cite one railroad for any track violations even though it averaged about 500 track defects each year. FRA did recommend civil penalties at other railroads during that time for the same types of track defects.

To achieve uniform application of FRA's safety regulations, GAO believes that railroads with similar defects need to be similarly assessed. FRA is revising its enforcement manual to provide inspectors with more complete guidance on the exercise of their discretion when deciding whether enforcement actions should be taken. This action is in response to recommendations GAO made in a July 1990 report. (See ch. 2.)

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### Civil Penalty Process Is Slow

In 1982 GAO found that FRA took 20 months to review, transmit, and settle civil penalties. Today, the process takes about 36 months. Various sources, such as the Office of Technology Assessment, a congressional report, and FRA itself, recognize that the deterrent effect of penalties decreases as the time between the violation and settlement increases. One reason for the lengthy process is that in fiscal year 1989 FRA had a backlog of about 24,000 violation reports awaiting review and/or settlement.

According to FRA's Office of Chief Counsel, the backlog occurred because of staff shortage and attrition, increased workload, and concurrent duties, such as drafting new regulations. In 1989 FRA took (1) an average of 14 months to review each violation even though FRA inspectors are asked to provide additional documentation for less than 5 percent of the recommended violations and (2) an additional 21 months to negotiate and settle the penalties.

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### An Option Exists to Help Improve the Enforcement Process

In 1989 the Federal Highway Administration's Office of Motor Carrier Safety implemented a new system that FRA could adopt to reduce the time for reviewing recommended penalties and settling with the railroads. The Highway Administration took this action to avoid a backlog because its legal staff had not increased although the number of inspectors had increased by 150. The new system allows the Highway Administration's regional directors to send civil penalty letters directly to motor carriers. The two Highway Administration regional offices that tested the new system reduced processing time from an average of 154

days to an average of 86 days and increased the penalty amounts collected.

FRA could adopt a similar civil penalty process by having its regional offices formally notify railroads of violations and penalty assessments. Since FRA inspectors develop sufficient evidence for about 95 percent of the violations, this approach would speed up the notification process by eliminating the Office of Chief Counsel's review. The railroads could then settle directly with the regional offices or ask to settle with the Office of Chief Counsel. (See ch. 2.)

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## Recommendations

To enhance the effectiveness of FRA's safety mission and strengthen the enforcement program, GAO is making recommendations to the Secretary of Transportation to quickly review and notify railroads of penalty assessments, consider the railroad's compliance history when negotiating penalty settlements, and more expeditiously settle civil penalty cases. (See ch. 2.)

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## Agency Comments

GAO discussed the facts presented in this report with the Administrator, FRA. According to the Administrator, FRA recognizes the need to change the enforcement program and has set a goal to settle violations with the railroads within 1 year of receipt in the Office of Chief Counsel. The Administrator also noted that FRA is considering other actions to review, transmit, and settle violations in a more timely manner, but had not decided on specific actions that would be taken. As requested, GAO did not obtain official written comments from FRA on a draft of this report.

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## Abbreviations

DOT	Department of Transportation
FRA	Federal Railroad Administration
GAO	General Accounting Office
OCC	Office of Chief Counsel





# Introduction

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The Federal Railroad Safety Act of 1970, as amended, directed the Secretary of Transportation to prescribe and enforce regulations for all areas of railroad safety. The Secretary has delegated these responsibilities to the Federal Railroad Administration (FRA). To carry out this responsibility, FRA has established safety rules and standards covering railroad track, signals, motive power and equipment, and operating practices. FRA also enforces the hazardous material regulations. The nation's railroads are primarily responsible for conducting safety inspections of their equipment and facilities. FRA monitors the railroads' inspection activities to detect noncompliance and independently inspects railroad activities. When FRA finds noncompliance and believes the best method of promoting compliance is to assess a civil (financial) penalty, the inspector prepares a violation report and recommends that FRA's Office of Chief Counsel (OCC) assess a penalty.

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## FRA's Approach to Railroad Safety

In 1989, the nation's rail system consisted of about 585 railroads with about 19,000 locomotives, 1.2 million freight cars, and over 200,000 miles of track. In 1989 the largest railroads employed about 39,600 track and signal personnel and about 97,000 locomotive and equipment personnel. To enforce its safety rules and standards, FRA has about 360 inspectors in 8 regional offices under the direction of an Associate Administrator for Safety at FRA's headquarters in Washington, D.C. Also, FRA relies on about 110 inspectors in 33 states to perform inspections for FRA under cooperative agreements.

To carry out its safety mission, FRA has established an inspection program to determine whether railroads comply with established safety rules and standards. When inspectors find noncompliance, they list each such condition—called a defect—in an inspection report, which is given to the railroad representative at the inspection site. The railroad is required to make repairs or take other actions to correct the defects or mitigate their potential for causing accidents or injuries.

In addition, FRA has established an enforcement program to encourage railroads to comply with the safety rules and standards. FRA has several tools to accomplish this—compliance orders telling railroads to comply, special repair notices telling railroads to fix specific safety problems, emergency orders that prohibit specific railroad operations, and civil penalties. Civil penalties, the cornerstone of FRA's enforcement program,

are used more than any other tool in trying to bring railroads into compliance. Because of the importance of civil penalties, in 1988 the Congress increased the maximum amounts from \$2,500 to \$10,000 for rail safety violations.

If inspectors determine that the best way to obtain compliance is to assess civil penalties for the defects, they recommend such penalties in violation reports that are submitted to FRA's OCC in headquarters. OCC is responsible for reviewing, assembling, transmitting, and settling the civil penalty cases with the railroads. The settlement of civil penalties with the railroads has historically resulted in settlement amounts lower than the initial assessment amounts. In part, FRA lowers the settlement amounts because the railroads present mitigating data or witnesses are no longer available to substantiate the information related to the recommended penalty.

According to FRA officials, train accidents decreased from 3,430 in 1985 to 3,080 in 1989. FRA data, however, show that fatalities due to moving trains increased from 23 to 29. Between 1985 and 1989, with a slightly declining workforce, FRA and state inspectors performed about 337,000 inspections and identified more than 1.7 million defects. About 960,000 defects were found in locomotive and equipment inspections, 624,000 in track inspections, and the remainder in signal, hazardous material, and other inspections. The inspectors recommended civil penalties for about 75,000 of the defects, or 4.3 percent.

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## Objectives, Scope, and Methodology

Concerned about railroad safety, the Chairman, House Committee on Energy and Commerce, asked us to assess the effectiveness of FRA's safety program. This report, the sixth in a series, focuses on FRA's enforcement program; a brief description of our five previous reports are shown on p. 28. Because civil penalties are the cornerstone of FRA's enforcement program, we primarily concentrated on the civil penalty process in this report. More specifically, we determined whether FRA's enforcement program (1) encourages railroads to comply with FRA's safety rules and standards; (2) is being uniformly implemented; and (3) is timely in reviewing, transmitting, and settling civil penalty cases. This report follows a July 1990 report on FRA's inspection program. Taken together, the reports assess the two components—inspection and enforcement—of FRA's safety program.

To accomplish our objectives, we conducted our review at FRA headquarters and three FRA regional offices (Chicago, Kansas City, and San Francisco). We reviewed the laws and regulations on railroad safety and FRA's internal procedures and instructions related to requiring railroads to correct safety defects; recommending civil penalties for defects; and assessing, negotiating, and settling the penalties. We discussed FRA's enforcement process with regional and headquarters officials as well as FRA's legal staff in headquarters.

To assess the adequacy and effectiveness of FRA's enforcement procedures, we reviewed FRA inspection and enforcement data for six railroads during the 5-year period, 1985 to 1989. We selected the six railroads to include four of the nation's largest railroads (Burlington Northern Railroad Company, Consolidated Rail Corporation, Southern Pacific Transportation Company, and Grand Trunk Western Railroad Company), one regional railroad (Iowa Interstate Railroad Ltd.), and one local railroad (Eureka Southern Railroad).<sup>1</sup> We focused our assessment on recurring inspection and enforcement actions identified through our review of records and/or discussions with inspection personnel. Therefore, our findings cannot be projected statistically to all railroads or to the total operations of each selected railroad. We also analyzed national inspection data and determined that these safety problems recurred nationwide during the 5-year period that we examined.

For the identified inspections and related enforcement actions at each railroad, we reviewed FRA headquarters files to obtain and analyze information on how the enforcement process works. The files included inspection reports, inspectors' violation reports, case files, compliance history files, penalty settlement documents, attorneys' files, and top priority case files. We did not verify whether these records contained all the documents that may have been obtained and retained by FRA inspectors.

We used data from FRA's Railroad Inspection Reporting System to help select inspections for further discussions with FRA and railroad officials about recurring problems and the uniformity of inspector decisions to recommend violations. FRA's Office of Safety Analysis provided us with data that identified the number and types of recurring safety defects

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<sup>1</sup>On the basis of the Association of American Railroads' definitions, large railroads are those with more than \$93.5 million in annual operating revenues, regional railroads those with between \$40 and \$93.5 million in annual operating revenues and/or at least 350 miles of track, and local railroads those with less than \$40 million in annual operating revenues and less than 350 miles of track.

and recommended violations as well as reports on FRA railroad inspection activity and results. We previously assessed the reliability of this data base and found it to be sufficiently accurate for purposes of our reports.

Additionally, we used information from FRA's two enforcement data bases to aggregate penalties assessed and settled, identify the backlogs of pending cases, and measure how long the process has taken for each case. Because the accuracy and completeness of these data bases did not need to be precise for our purposes, we did not assess their reliability.

Finally, we met with officials from the Association of American Railroads, the National Association of Regulatory Utility Commissioners, the Federal Highway Administration, two of the six railroads; and state railroad safety officials in Nebraska, Kansas, California, and Tennessee, who participate in FRA's safety program to discuss safety enforcement.

We conducted our work from September 1989 to January 1991 in accordance with generally accepted government auditing standards. We discussed the factual information in this report with FRA's Administrator and top level safety and enforcement officials. Their comments have been incorporated in the report where appropriate. As requested, we did not obtain official written agency comments on a draft of this report.

# FRA's Safety Enforcement Program Not Effective

FRA's enforcement program is designed to encourage railroads to comply with safety rules and standards. However, FRA does not effectively ensure compliance because the same types of safety defects recur each year and, for the most part, in increasing numbers. The effectiveness of FRA's enforcement program is hampered by the lack of uniformity among FRA inspectors in applying FRA's safety regulations and the length of time it takes to assemble, transmit, and settle civil penalty cases.

## Recurring Railroad Safety Problems

FRA's enforcement program does not encourage railroads to comply with safety regulations. Between January 1985 and December 1989, safety defects and violations increased annually even though FRA's workforce and railroad employment, track, and equipment declined. In addition, despite fewer accidents, FRA found the same types of defects recurring each year at railroads, generally at increasing rates. These defects recurred despite the railroads being fined year after year for the same types of safety problems.

Three disciplines (motive power and equipment, signal, and hazardous materials) experienced a slight decrease in defects between 1988 and 1989. In all cases, however, the number of defects cited in 1989 were higher than in 1985—FRA identified more than 390,000 safety defects in 1989, as opposed to about 289,770 in 1985. During this 5-year period, the total number of violations reflected the increases in defects—FRA recommended civil penalties for about 17,700 defects in 1989, or about 4.5 percent (as opposed to about 2.9 percent in 1985). A more in-depth analysis of six railroads also showed numerous instances of recurring safety defects and violations. According to FRA's Administrator, these trends may continue and even increase as the agency implements a new strategy to better target problem areas warranting greater inspection coverage.

## Track Safety Defects and Recommended Violations

FRA's regulations require railroads to self-inspect their track according to prescribed schedules to detect deviations from the safety standards. The standards prescribe minimum requirements that track must meet, including the joints that hold the rails together, crosstie conditions, and track widths. Civil penalties for track violations range from \$1,000 to \$10,000 per violation. When track defects are found by FRA, state, or industry inspectors, the railroads must either repair the track, slow train traffic to speeds appropriate for the conditions of the track, or halt operations.

According to FRA officials, track-caused accidents decreased from 1,280 in 1985 to 1,019 in 1989. Our analysis of FRA track inspection reports and violation data showed that between January 1985 and December 1989 the total number of defects and violations generally increased while the total amount of track decreased and volume of freight activity increased nationwide. As shown in table 2.1, total track defects recurred and increased from over 107,900 to over 155,800 and recommended violations increased from 863 to 1,980.

**Table 2.1: Number of Track Defects and Recommended Violations**

<b>Defects</b>	<b>1985</b>	<b>1986</b>	<b>1987</b>	<b>1988</b>	<b>1989</b>
All track defects	107,932	110,158	124,903	125,628	155,843
<b>Selected track defects</b>					
Self-inspection	3,064	3,047	3,945	3,748	3,000
Ties	24,253	23,352	26,181	25,561	30,752
Track width	4,176	4,159	4,400	3,824	3,616
Center cracked or broken joint bars	10,513	10,409	11,737	10,559	10,212
<b>Recommended violations</b>					
All track violations	863	1,173	1,077	1,444	1,980
<b>Selected track violations</b>					
Self-inspection	60	174	180	312	231
Ties	178	218	202	334	769
Track width	73	48	70	106	114
Center cracked or broken joint bars	108	69	65	93	189

Source: FRA, Office of Safety Analysis.

We also found that certain types of track defects recurred each year on the railroads we studied. For example, FRA track inspection results for the railroads in our study showed that rail joint bar defects were a recurring problem. Joint bars keep rail ends together. If rail ends are not secure, the weight of the train forces the rail end out, allowing the train wheel to jump the track and cause a derailment. If the center of a joint bar is cracked, it loses its strength and could break with the weight of a train and also cause a derailment. Because of the seriousness of center cracked or broken joint bar defects, FRA's minimum penalty for these violations is \$5,000.

One railroad in our study has a rail line that carries freight, including hazardous material, through the mountains. In early 1988 an FRA inspector found 187 track defects, including numerous center cracked or

broken joint bars, at that railroad. The inspector did not recommend violations for any of the defects but after each inspection informed the railroad's site representative about the problems. A December 1989 FRA inspection on the same rail line found 96 center cracked or broken joint bars that had been marked for replacement by the railroad's own track inspector 3 weeks earlier. The FRA inspector found that the railroad had not issued, as FRA requires, a slow order on the track pending replacement of the defective joint bars. Because the railroad did not comply with FRA's rules and standards, the inspector recommended that the violations be assessed maximum penalties, which under FRA's penalty schedule for willful violations would be \$7,500 each and total about \$720,000. As of December 1990, no violations had been assessed because OCC had not reviewed the recommended violations.

FRA's track regulations also set minimum requirements for rail ties. The regulations require that each 39 foot segment of track have enough ties to hold gage (the distance between the inner side of the two rails) within certain limits. If the track gage is too wide or too narrow, train wheels can derail. FRA's regulations define specific track widths for safe operation of trains at various speeds. Tie and related track gage defects were prevalent on many of the railroads we studied. One railroad had a recurring compliance problem that escalated over the period of our study. For example, in 1985 FRA found about 5,240 track width and tie defects for which 100 violations were recommended. In 1989 FRA found about 6,700 track width and tie defects and recommended that about 500 be cited as violations. As of December 1990, only 37 of the 1989 violations had been settled.

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## Operating Practice Defects and Recommended Violations

FRA's regulations governing railroad operating practices require, among other things, that railroads maintain written operating rules as well as programs for monitoring and instructing their personnel to ensure the rules are followed. The regulations also require self-reporting of accidents and incidents and that railroads keep current copies of the rules and related programs on file at FRA headquarters. Railroads are subject to civil penalties for either not having or not filing their operating rules and related monitoring and instructional programs with FRA or for not accurately reporting accidents and injuries. According to FRA's Administrator, many of the accidents resulted from human error rather than equipment failure. In fact, FRA recognizes that accidents caused by human factors—999 in 1985 and 982 in 1989—have not declined as drastically as all other accident types. Table 2.2 shows that operating



practice defects recurred and almost doubled nationally between January 1985 and December 1989 despite a decline in the total number of railroad employees.

**Table 2.2: Number of Selected Types of Operating Practice Defects and Recommended Violations**

<b>Defects</b>	<b>1985</b>	<b>1986</b>	<b>1987</b>	<b>1988</b>	<b>1989</b>
All operating practice defects	3,317	4,503	5,546	6,016	6,367
Selected operating practice defects					
Railroad operating rules	52	135	155	161	165
Railroad operating practices	1,019	1,072	1,098	787	1,046
Accident and incident reporting	81	237	566	330	496
<b>Recommended Violations</b>					
All operating practice violations	1,090	851	858	1,130	1,056
Selected operating practice violations					
Railroad operating rules	2	3	1	11	10
Railroad operating practices	352	301	287	214	237
Accident and incident reporting	15	60	138	148	107

Source: FRA, Office of Safety Analysis.

Our analysis of operating practice inspection results for the six railroads showed that three fluctuated, and three generally followed the national trends. In one case, as early as September 1987, FRA inspectors cited a defect upon finding that a railroad was not conducting required tests and inspections to determine whether employees understood the operating rules. In July 1988 one of this company's trains collided with another train killing two crew members and releasing hazardous material. The National Transportation Safety Board concluded that the crews' failure to follow operating rules was a factor in the accident.

The Safety Board reported that one train crew had not followed an operating rule, and the conductor of one train had never received formal training on the railroad's operating rules. Following the accident, FRA conducted several inspections and recommended citing two violations. In May 1989 OCC assessed the railroad \$750 for failing to install a yard speed limit sign and \$500 for failing to provide operational testing. In February 1990 FRA settled these violations over the telephone with the railroad for \$250 and \$500, respectively.

FRA also requires railroads to submit monthly reports summarizing collisions, derailments, and other accidents, as well as injuries to passengers, employees, and others on railroad property. One railroad in our study

has repeatedly been penalized for accident and incident reporting violations. In 1987 FRA had evidence that the railroad deliberately avoided reporting employee injuries and found 22 instances of failure to report accidents or injuries. FRA recommended penalties for 19; in 1988 FRA inspectors found 61 such instances and recommended penalties for 54; and in 1989 found 56 instances, recommending penalties for 39. From 1985 to 1989, this railroad paid \$121,900 for accident and incident reporting violations that occurred between 1984 and 1987. Despite these penalties, between January and June 1990, FRA inspectors found 148 instances of the railroad's failure to report accidents and injuries and had recommended penalties for 44.

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### Motive Power and Equipment Defects and Recommended Violations

FRA's regulations set standards for freight cars and locomotives that are mainly enforced by motive power and equipment inspectors. FRA has very specific safety standards regarding railroad self-inspection of locomotives and cars, the safety devices that should be on the equipment to reduce injuries and accidents, and the testing and maintenance of brake systems.

Our analysis of FRA inspection and violation data showed that motive power and equipment defects and recommended violations recurred between January 1985 and December 1989 even though the volume of equipment used has slightly decreased. According to FRA's Administrator, equipment-caused accidents declined from 559 in 1985 to 501 in 1989. As shown in table 2.3, only freight car defects declined steadily between 1985 and 1989, but freight car violation recommendations increased.

**Table 2.3: Number of Motive Power and Equipment Defects and Recommended Violations**

<b>Defects</b>	<b>1985</b>	<b>1986</b>	<b>1987</b>	<b>1988</b>	<b>1989</b>
All equipment defects	158,466	182,606	206,231	214,943	200,544
<b>Selected equipment defects</b>					
Freight car	43,138	40,529	38,267	35,570	33,773
Locomotive	26,035	36,382	54,835	59,790	54,648
Safety appliance	47,545	59,633	65,546	68,752	68,132
Brakes	41,258	45,568	47,120	50,427	43,585
<b>Recommended Violations</b>					
All equipment violations	5,784	7,711	13,046	15,469	11,848
<b>Selected equipment violations</b>					
Freight car	1,912	2,457	2,836	3,219	2,598
Locomotive	1,092	2,463	6,726	8,726	6,617
Safety appliance	1,245	1,332	2,031	1,940	1,540
Brakes	1,513	1,426	1,423	1,566	1,076

Source: FRA, Office of Safety Analysis.

In reviewing FRA inspection data at two railroads, we found continued noncompliance with locomotive regulations. FRA's regulations generally require that locomotives cannot be used until all defects identified by either self-inspections or FRA inspections are eliminated. Penalties for locomotive violations range from \$1,000 to \$5,000.

FRA locomotive inspections in 1985 at one railroad we studied identified 3,140 instances in which the railroad had locomotives that did not meet FRA safety requirements. Inspectors recommended 135 violations and ordered 16 locomotives out of service until repaired. Over the next 4 years, FRA inspectors identified increasingly large numbers of defects with this railroad's locomotives. For example, locomotive defects increased steadily from 3,140 in 1985 to 4,094 in 1986 and up to 5,954 in 1989. Violation recommendations also increased from 135 in 1985 to 241 in 1986 to 748 in 1989. The same types of defects and violations continued to be identified throughout this period.

After years of assessing over \$350,000 in penalties, FRA inspectors continued to find large numbers of locomotive safety problems at this railroad. In February 1990 FRA ordered 38 locomotives in one of the railroad's yards to be taken out of service until repaired to meet FRA safety requirements. Because this action stopped the movement of all these trains and their cargo until the locomotives met FRA safety standards, railroad officials took action. In response, the railroad revised its

locomotive compliance program in March 1990, with the objective of significantly reducing safety defects.

## No Uniformity Exists in Recommending Penalties

The Federal Railroad Safety Act of 1970, as amended, requires that safety regulations be as uniform as possible throughout the industry. FRA's stated policy is that uniform application of the act is essential for effective program management. Certain defects, such as ties so deteriorated that the gage exceeds 58 inches and the lack of drill holes to bolt a joint to the track, should be cited as violations with civil penalties. We found, however, that FRA inspectors do not uniformly apply safety rules and regulations.

In a July 1990 report on FRA's inspection program, we concluded that FRA inspectors were not uniformly applying safety rules and regulations.<sup>1</sup> Our review of FRA inspection data between 1986 and 1988 revealed numerous examples of one FRA region filing many more violations than another—often for the same type of defective condition. For example, in 1988 one FRA region cited railroads for inadequate track inspection records 312 times, but filed no violation reports. Another FRA region found the same problem 433 times in 1988 and cited it as a violation 165 times.

FRA inspectors rely on their knowledge of the railroads to make civil penalty decisions. When inspectors find safety defects, they have discretion to determine whether the defects warrant a civil penalty. For example, in a series of inspections in October 1986, an FRA inspector identified 216 track defects in one railroad yard and recommended a civil penalty for violating track self-inspection requirements. A November 1986 inspection at the same yard revealed about 100 of the same defects identified in October, and the inspector recommended 10 violations with civil penalties for defects first identified in October 1986.

At another railroad, an inspector found 130 center cracked or broken joint bar defects in early 1988, but did not recommend any violations. In November 1989 another FRA inspector found 99 of the same type of track defects on the same rail line as found in early 1988. Again, no violations were recommended. The rail line was again inspected in

<sup>1</sup>Railroad Safety: New Approach Needed for Effective FRA Safety Inspection Program (GAO/RCED-90-194, July 31, 1990).

December 1989 and 96 of the same type of track defects were found. At that time the inspector recommended civil penalties for all 96 defects.

We also found railroads that did not receive any violations for certain track defects during the period 1985 to 1989. For example, one regional railroad owning over 500 miles of track averaged about 500 track defects yearly during this period but did not receive any violations. In 1989 this railroad had 965 reported defects, but no recommended violations. FRA did recommend civil penalties at other railroads during that time for the same types of track defects.

To ensure uniformity in recommending violations, we previously recommended that FRA increase inspector training, especially for new inspectors, and issue formal guidance to inspectors reemphasizing the need for uniformity in citing violations. In response to our recommendation, FRA hired a Director of Communications and Training to coordinate training for new and existing federal and state inspectors as well as regional directors and their deputies. FRA officials also said that all enforcement manuals are being revised to, in part, provide inspectors with more complete guidance on the exercise of their discretion when deciding whether enforcement actions should be taken.

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## Civil Penalty Process Slow

In 1982 we reported that FRA's civil penalty process was not sufficient to ensure that railroads complied with federal rail safety rules and regulations because the penalties were not swift—it took an average of 20 months to settle safety violations.<sup>2</sup> FRA's civil penalty process is still not effective because FRA's legal review and negotiating process is so lengthy that it is not a deterrent to noncompliance.

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## Civil Penalty Assessments and Settlements Not Timely

The thrust of FRA's enforcement program is to bring serious safety defects to the attention of the railroads, gain compliance, and deter future noncompliance. FRA's current civil penalty process is time consuming—it takes about 3 years from the time an inspector identifies a violation until the violation is settled. This lengthy process provides little incentive for the railroads to comply. In fact, an OCC mission statement said that some railroads view civil penalties as a cost of doing business, and inspectors have commented that penalties are not effective because it takes too long to process and settle them.

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<sup>2</sup>The Federal Approach to Rail Safety Inspection and Enforcement: Time for Change (CED-82-51, Apr. 19, 1982).

Several sources have indicated that the deterrent effect of civil penalties diminishes as the time between commission and settlement increases. First, in a 1978 report, the Office of Technology Assessment stated that, as the time increases between the violations and the settlement date, the deterrent effect of the violations decreases. Because FRA was taking on average 16 months to settle violations, the Office of Technology Assessment noted that the impact of the civil penalty as a deterrent to violations was clearly reduced. Also, in commenting on FRA's 1981 System Safety Plan, OCC stated that one test of an effective civil penalty program is timeliness. OCC said that assessments following events by months or years are less likely to influence future compliance than penalties applied "while the memory is fresh" and timely demands for penalties put railroads on notice that current conduct will have immediate consequences. In addition, the National Association of Regulatory Utility Commissioners reported, and state inspectors who participate in FRA's program told us, that the length of time detracts from the deterrent effect of civil penalties.

Finally, the report accompanying the Senate transportation appropriations bill for fiscal year 1990 noted that "effective and meaningful enforcement requires the prompt settlement of enforcement cases" and that, in the interest of safety, penalty cases should be "settled within a reasonable period of time from when the violations were first documented." The report did not, however, define a time limit that it considered to be reasonable.

When FRA identifies a defect and determines that the best way to obtain compliance is by assessing a civil penalty, the inspector notes this in the inspection report that is given to the local railroad official. Those violations that the inspectors determine have resulted, or could result, in a hazardous material release, passenger train accident, or death or serious injury to a rail employee or private citizens are called "top priority" violations. Top priority designation is intended to quickly bring these violations to the railroad's attention.

Inspectors are responsible for preparing a report describing the violation and providing evidence to support it. After review by regional officials, the violation reports are sent to OCC where they are reviewed for legal sufficiency. Historically, less than 5 percent of the violation reports are returned to the regional offices for more supporting documentation. OCC assesses penalties by sending the railroad a penalty demand letter that cites the specific violations and the penalty amounts.

Once the penalties are assessed, the railroads can either pay the amount demanded or provide additional information to challenge the penalty. For larger railroads, settlement conferences are generally held each year where cases transmitted since the last conference are discussed. Smaller railroads generally handle this process over the telephone or through the mail. FRA attorneys generally do not access current inspection data before settlement conferences. If they did, they would know whether the railroad is still experiencing the same types of safety defects and factor such information into the negotiations with the railroads. For example, beginning in early 1988, FRA inspectors found numerous center cracked or broken joint bars at one railroad, but did not recommend civil penalties until December 1989. When these violations come up for settlement, FRA attorneys should analyze current inspection data to determine whether the railroad is still experiencing these problems. If so, the attorneys should consider this information in deciding how to settle the penalties, thereby sending a clear message to the railroad that FRA views these as serious problems and expects them to be corrected. Once the parties have agreed on a settlement amount, the agreement is put in writing and the railroads have 30 days to make payment.

FRA's enforcement process can take 3 years or longer. For example, cases settled in fiscal year 1989 took an average of 1,134 days to settle after the violation was noted. The 1,134 days is the average elapsed time between the date violations were noted and the date FRA reached agreement with the railroads on the amount of the penalties to be paid. The 1989 average is up from 1,045 days in 1988 and 811 days in 1987. Our analysis shows that for fiscal year 1989 FRA took an average of about 77 days from the time a violation was noted until the report was received in OCC. After receipt, OCC took another 422 days on average to review each violation and send it to the railroads. OCC took about 635 days to settle the violations after they were sent to the railroads.

Part of the reason for the time delay is that FRA currently has a backlog of violations that need to be reviewed. FRA officials said that the backlog developed because of attorney staff shortages and attrition, an increasing violation caseload, and concurrent attorney duties, such as drafting 16 new safety regulations. In May 1986 FRA had a backlog of about 5,335 violations; in May 1988 this total had grown to over 13,000, and at the end of 1989 to almost 18,000. According to the FRA Administrator, at the end of 1990, the backlog had been reduced to about 9,500.

Even for those serious violations identified by FRA as "top priority," the process takes several hundred days. Between October 1985 and

December 1989, OCC designated 136 violations as top priority. As of December 31, 1989, 50 percent had been settled, and cases involving the remaining 68 violations, including 30 from 1986 and 1987, were pending. Twenty of these violations were identified in January and February 1987 at one railroad as a result of a special effort to detect tampering with safety devices on locomotives after the January 1987 accident at Chase, Maryland. The elapsed time between the dates of the violations and the settlement dates in the 68 settled cases averaged about 790 days. At the end of 1989, the elapsed time on the 68 pending cases averaged about 660 days. According to OCC officials, FRA has recognized the need to settle top priority cases more rapidly and in March 1990 implemented new procedures to meet this goal.

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### **Alternative Approach to Civil Penalty Process**

An option exists that could reduce the amount of legal review, speed the settlement of penalties, increase collections, and restore FRA's effectiveness in enforcing its safety rules and regulations. In 1989 the Federal Highway Administration, Office of Motor Carrier Safety, implemented a new system allowing its regional directors to send civil penalty letters to motor carriers. The highway administration took this action to avoid a backlog because the number of inspectors had increased by 150 although its legal staff had not increased. While it is too early to tell the complete impact of the highway administration's change, the results of a pilot project at two of its regional offices show that processing time decreased from an average of 154 days to an average of 86 days, and the penalty amounts collected increased. According to highway officials, the new processing system also increased the effectiveness of their enforcement of safety regulations.

FRA could adopt a similar civil penalty process by having its regional offices formally notify railroads of violations and the amounts of the penalties. Since less than 5 percent of inspector's violation reports are returned for more supporting documentation, it appears the inspectors are developing legally sufficient violation reports before sending them to OCC. This approach would speed up the notification process by eliminating OCC's legal review. The railroads could then settle directly with the regional offices or ask to settle with OCC.

According to the Administrator, FRA recognizes that the enforcement program needs to be changed. FRA has already acted to reduce the backlog of violations and has established a goal of settling violations with the railroads within 1 year of receipt at OCC. The Administrator noted that FRA is also considering other actions to assess, transmit, and



settle civil penalty cases in a more timely manner but as had not decided on the specific actions that would be taken.

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## Conclusions

FRA's enforcement program does not ensure that the nation's railroads comply with federal safety regulations. Although FRA may not be able to eliminate all safety problems, an effective enforcement program should help reduce the number of violations. However, we found that the opposite has occurred—the number of safety defects and violations cited by FRA inspectors has grown over the past 5 years.

Moreover, similar safety problems recur each year on the nation's railroads because FRA inspectors did not uniformly apply safety standards and did not take the same enforcement actions against different railroads with the same types of safety problems. We believe that if FRA's inspectors determine that one situation warrants a civil penalty, then other railroads with similar defects should be similarly assessed. By allowing these situations to occur, FRA could send a message that safety is not important.

In addition, when settling civil penalties, FRA attorneys do not use current inspection data to determine the railroad's level of compliance with federal safety regulations. This additional data would give FRA information needed to make railroads settle at a higher proportion of the assessed amount and would send a clear message that safety problems must be corrected.

Further, the time taken to settle cases renders the enforcement process ineffective. As early as 1982, we reported that as the length of time increases between when a violation is noted and the civil penalty is settled, the deterrent effect of the fine decreases. We believe this observation is equally true today when FRA now takes about 36 months—16 months longer than in 1982—to assess and settle civil penalty cases.

FRA has an option available to reduce the time needed to review recommended penalties and settle with the railroads. FRA could allow its regional offices to formally notify railroads of violations and the civil penalty amounts. Since FRA inspectors appear to develop a legally sufficient report for about 95 percent of the violations, this approach would eliminate the 14-month legal review process. The Federal Highway Administration recently implemented such a system. The two highway administration regional offices that tested the new system significantly reduced processing time and increased the penalties collected.

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## **Recommendation**

To make FRA's railroad safety enforcement program more effective in helping to ensure future compliance, we recommend that the Secretary of Transportation direct the Administrator, FRA, to establish a penalty process that (1) quickly notifies railroads of penalty assessments, (2) considers the railroad's compliance history when negotiating penalty settlements, and (3) settles civil penalty cases expeditiously.



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# Major Contributors to This Report

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Resources,  
Community, and  
Economic  
Development Division,  
Washington, D.C.

Roy J. Kirk, Assistant Director  
John S. Kalmar, Jr., Assignment Manager  
Sara Moessbauer, Operations Research Analyst

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Chicago Regional  
Office

Gwenetta Blackwell, Regional Management Representative  
Sarah R. Brandt, Staff Evaluator  
Jacqueline B. McFarlane, Staff Evaluator



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# Related GAO Products

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Railroad Safety: FRA Needs to Correct Deficiencies in Reporting Injuries and Accidents (GAO/RCED-89-109, Apr. 5, 1989).

We recommended actions to improve the accuracy of accident and injury data reported by railroads to FRA. FRA agreed and is conducting more records inspections and requiring railroads to set up internal controls for reporting.

Railroad Safety: DOT Should Better Manage Its Hazardous Materials Inspection Program (GAO/RCED-90-43, Nov. 17, 1989).

In response to this report, FRA hired additional inspectors and is revising its inspection guidelines.

Railroad Safety: New Approach Needed for Effective FRA Safety Inspection Program (GAO/RCED-90-194, July 31, 1990).

We made a number of recommendations that will provide FRA with a better measure of whether railroads are operating safely. These recommendations included defining inspection coverage, refining the approach to targeting inspections, establishing a follow-up program, and ensuring that safety standards are uniformly applied.

Railroad Safety: FRA's Staffing Model Cannot Estimate Inspectors Needed for Safety Mission (GAO/RCED-91-32, Nov. 21, 1990).

We reported that FRA needed to include more information in its calculations of inspector staff needs.

Financial Management: Internal Control Weaknesses in FRA's Civil Penalty Program (GAO/RCED-91-47, Dec. 26, 1990).

We reported that FRA did not have adequate financial internal controls for civil penalties.

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