

DOCUMENT RESUME

05618 - [B0765691] **RELEASED**

Commuter Railroad Safety Activities on Conrail's Lines in New York Should Be Improved. CED-78-80; B-164497(5). March 15, 1978. Released March 15, 1978. 27 pp. + 5 appendices (12 pp.).

Report to Rep. Fred B. Rooney, Chairman, House Committee on Interstate and Foreign Commerce: Transportation and Commerce Subcommittee; by Robert F. Keller, Acting Comptroller General.

Issue Area: Transportation Systems and Policies (2400).

Contact: Community and Economic Development Div.

Budget Function: Commerce and Transportation: Ground Transportation (404).

Organization Concerned: Department of Transportation; Federal Railroad Administration; Consolidated Rail Corp.

Congressional Relevance: House Committee on Interstate and Foreign Commerce; House Committee on Interstate and Foreign Commerce: Transportation and Commerce Subcommittee; Senate Committee on Commerce. Rep. Fred B. Rooney.

Authority: Locomotive Inspection Act (45 U.S.C. 22). Accident Reports Act (45 U.S.C. 38). Hours of Service Act (45 U.S.C. 61). Signal Inspection Act (49 U.S.C. 26). Federal Railroad Safety Act of 1970. 45 U.S.C. 431. =49 C.F.R. 213. =49 C.F.R. 230. =49 C.F.R. 236. =49 C.F.R. 217. =49 C.F.R. 228.

The Federal Railroad Administration (FRA) is responsible for regulating safety functions, investigating accidents and issuing reports on them, and administering railroad safety laws. The Consolidated Rail Corporation (Conrail), which operates commuter services in the New York metropolitan area, is responsible for implementing safety requirements through inspection, setting of standards, accident reporting, and recordkeeping. Findings/Conclusions: Conrail did not conduct all safety activities prescribed by FRA regulations. Conrail's commuter railroad inspectors failed to inspect track and switches at required intervals, conduct followup inspections, and correct deficiencies noted. Although Conrail generally inspected equipment within the required 30-day period, records did not reflect defects, repairs required, or corrective action taken. Conrail could not effectively determine its employees' understanding of safety rules since they were not graded on this knowledge. Accident/incident reports showed a direct relationship between deficient inspection procedures and subsequent accident/incidents. FRA has not been effective in its regulatory role. Its inspections are ineffective because of limited territorial coverage, limited followup, and Conrail's failures to correct deficiencies and keep required records. FRA has not taken corrective action on deficiencies noted in a previous GAO report. Recommendations: Conrail should: adhere to FRA standards concerning required inspections and mandate followup on the deficiencies noted, keep adequate records on the 30-day equipment inspection describing the condition of the

equipment, and grade or evaluate employees' test results to determine whether they know railroad operating rules. FRA should monitor Conrail compliance with safety regulations rather than only conduct inspections supplementary to Conrail's. (HTW)

REPORT BY THE

RELEASED 3/15/78

Comptroller General

OF THE UNITED STATES

Commuter Railroad Safety Activities On Conrail's Lines In New York Should Be Improved

According to this report to the Subcommittee on Transportation and Commerce, House Committee on Interstate and Foreign Commerce, inadequacies in Conrail's safety activities on its commuter lines in Metropolitan New York need to be corrected.

Conrail was not making most required safety inspections, and its records did not show corrective action taken on deficiencies noted. Also Conrail's records did not contain sufficient information to permit an assessment of the overall safety of Conrail's commuter operations.

The Federal Railroad Administration is responsible for establishing railroad safety standards and assuring that carriers comply with them. It has been ineffective in its regulatory role because it has not adequately monitored Conrail's safety activities.



GED-78-80

MARCH 15, 1978



COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

B-164497(5)

The Honorable Fred B. Rooney, Chairman
Subcommittee on Transportation and
Commerce
Committee on Interstate and Foreign
Commerce
House of Representatives

Dear Mr. Chairman:

Pursuant to your request of February 14, 1977, and a subsequent meeting with your office, this is our report on Conrail's safety inspection activities covering commuter service on its Harlem/Hudson and New Haven divisions. The report also discusses the safety responsibilities of the Federal Railroad Administration.

We obtained written comments on this report from Conrail and the Department of Transportation. The Metropolitan Transportation Authority in New York and the Connecticut Department of Transportation were also given an opportunity to comment, but they did not choose to do so.

As arranged with your office, we are sending copies of this report to the Acting Director, Office of Management and Budget; the Secretary of Transportation; various Senate and House committees; Members of Congress; the Chairman and Chief Executive Officer, Consolidated Rail Corporation; the Chairman and Chief Executive Officer, United States Railway Association; the Metropolitan Transportation Authority; the Connecticut Department of Transportation; and other interested parties.

Sincerely yours,


ACTING Comptroller General
of the United States

COMPTROLLER GENERAL'S REPORT
TO THE SUBCOMMITTEE ON
TRANSPORTATION AND COMMERCE
HOUSE COMMITTEE ON INTERSTATE
AND FOREIGN COMMERCE

COMMUTER RAILROAD
SAFETY ACTIVITIES
ON CONRAIL'S LINES
IN NEW YORK SHOULD
BE IMPROVED

D I G E S T

Conrail, the Consolidated Rail Corporation which operates commuter services in the New York metropolitan area, was not conducting all the safety activities prescribed by Federal Railroad Administration regulations which are required by law. A GAO review of records revealed:

--Conrail's commuter railroad inspectors had failed to (1) inspect track and switches at required intervals, (2) conduct followup inspections, and (3) correct deficiencies noted.

--Conrail generally was inspecting equipment within the required time frame (30 days). However, the records did not reflect the safety defects noted, the repairs required, or the corrective action taken. Therefore, the effectiveness of these inspections could not be independently determined.

--Conrail did not grade or evaluate employees' annual examinations of railroad operating rules. Conrail thus could not effectively determine how well its employees understand its safety rules.
(See p. 14.)

In addition, accident/incident reports revealed a direct cause/effect relationship between deficiencies in Conrail's inspection procedures and subsequent accidents/incidents. (See p. 8.)

GAO recommends that Conrail:

--Adhere to the Federal Railroad Administration standards concerning required inspections and mandate followup on deficiencies noted.

--Keep adequate records on the 30-day equipment inspection describing the condition of the equipment.

--Grade or evaluate employees' test results to determine whether they know railroad operating rules.
(See p. 18.)

Conrail disagreed with many of GAO's conclusions. For example, Conrail stated that its performance of track and switch inspections was better than GAO had found. GAO has evaluated Conrail's position, and finds no basis for revising GAO's conclusions. Conrail also stated that it has since made many improvements in its way of doing things. (See p. 14.)

The Federal Railroad Administration is responsible for establishing railroad safety standards and assuring that carriers comply with them.

The Administration has not been effective in its regulatory role and has not adequately monitored Conrail's safety activities. The Administration is conducting inspections similar to Conrail's, but they are ineffective because of

- limited territorial coverage,
- limited inspection followup,
- Conrail's failure to correct reported deficiencies, and
- Conrail's failure to keep required records of inspection.

The Federal Railroad Administration could better use its limited resources by emphasizing monitoring, which would enable it to systematically determine

- the quality and timeliness of Conrail inspections,
 - whether safety defects are being reported, and
 - whether corrective actions are being taken.
- (See p. 20.)

In 1975 a GAO report concluded that the Administration's monitoring of carrier performance was ineffective. Although the Administration acknowledged this condition and promised corrective action, no progress has been made. (See p. 23.)

GAO recommends that the Federal Railroad Administration monitor Conrail compliance with safety regulations rather than only conduct inspections supplementary to Conrail's. (See p. 24.)

The Department of Transportation believes that monitoring of Conrail's compliance should include both inspections and reviews of the carrier's records. GAO agrees but is making its recommendation because the Federal Railroad Administration was limiting its activities almost exclusively to supplementary inspections. (See p. 24.)

Federal and State funding provided for operating costs and capital improvements is not earmarked for safety activities. These funds are provided by the respective State operating authorities. GAO obtained data on operating costs and capital improvements. (See p. 26.)

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ABBREVIATIONS

CDOT	Connecticut Department of Transportation
Conrail	Consolidated Rail Corporation
FRA	Federal Railroad Administration
GAO	General Accounting Office
GCT	Grand Central Terminal
MTA	Metropolitan Transportation Authority
OMB	Office of Management and Budget
OST	Office of the Secretary of Transportation
UMTA	Urban Mass Transportation Administration

CHAPTER 1

INTRODUCTION

On February 14, 1977, the Chairman, Subcommittee on Transportation and Commerce, House Committee on Interstate and Foreign Commerce, asked us to review the safety activities of the Consolidated Rail Corporation's (Conrail's) commuter operations serving the New York metropolitan area. Specifically, we were asked to:

- Evaluate the responsibilities and efforts of the Federal Railroad Administration (FRA).
- Evaluate Conrail's safety efforts, including the nature and frequency of its safety inspections.
- Identify the role of the Metropolitan Transportation Authority (MTA) and other transportation authorities.
- Analyze Federal and State funding involved.

At a subsequent meeting it was agreed that our review would be limited to the commuter service operations in Conrail's Metropolitan Region, which includes the Harlem/Hudson and New Haven divisions. The scope of our review is included on page 4.

FRA'S RESPONSIBILITIES

FRA is responsible for (1) regulating safety functions pertaining to railroads, (2) investigating and issuing reports concerning collisions, derailments, and other railroad accidents resulting in serious injury to persons or to the property of the railroad, and (3) administering the railroad safety laws. These are:

- The Locomotive Inspection Act (45 U.S.C. 22-34).
- The Accident Reports Act (45 U.S.C. 38-43).
- The Hours of Service Act (45 U.S.C. 61-64).
- The Signal Inspection Act (49 U.S.C. 26).
- The Federal Railroad Safety Act of 1970 (45 U.S.C. 431).

The FRA staff whose territories encompass Conrail's Harlem/Hudson and New Haven divisions are located at the Newark District Office in Newark, New Jersey. Four field inspectors and one supervisor at this district office are responsible for seeing that Conrail and other railroads in their jurisdiction comply with Federal safety standards. An additional signal inspector in Albany, New York, works on the Harlem/Hudson division.

FRA also has responsibility for establishing safety standards for rail cars. While there are design safety standards for freight cars, FRA officials stated that there are no design safety standards for passenger cars operated as part of a general railroad system of transportation.

CONRAIL'S SAFETY RESPONSIBILITIES

Conrail's safety responsibilities, as they relate to its commuter activities, call for implementing FRA's safety requirements included in operating manuals for the following disciplines: (1) track, (2) equipment, (3) signal and train control, and (4) operating practices. In implementing these requirements Conrail inspects track, equipment, and signal systems; sets standards to satisfy compliance with the hours of service of railroad employees and railroad operating rules; reports on railroad accidents/incidents; and keeps records on these activities.

CONRAIL METROPOLITAN REGION COMMUTER RAIL SERVICE

Conrail's Metropolitan Region, headquartered in New York's Grand Central Terminal (GCT) area, is responsible for providing suburban rail passenger service on its Harlem/Hudson and New Haven divisions.

Service on the Harlem/Hudson division is provided from GCT to Dover Plains, New York, on the Harlem line and from GCT to Poughkeepsie, New York, on the Hudson line. Connecticut service is provided on the New Haven division from GCT to New Haven (including three branches). (See app. II.)

The numbers of passengers, by line, for the last 6 years follow.

	<u>1971</u>	<u>1972</u>	<u>1973</u>
Harlem	14,355,567	13,947,261	13,728,454
Hudson	7,255,098	7,010,306	6,857,256
New Haven	<u>17,037,740</u>	<u>16,755,465</u>	<u>16,311,100</u>
Total	<u>38,648,405</u>	<u>37,713,032</u>	<u>36,896,810</u>
	<u>1974</u>	<u>1975</u>	<u>1976</u>
Harlem	14,666,498	14,427,876	
Hudson	7,441,919	7,345,037	a/21,735,074
New Haven	<u>17,591,995</u>	<u>17,531,598</u>	<u>18,065,135</u>
Total	<u>39,700,412</u>	<u>39,304,511</u>	<u>39,800,209</u>

a/Total for both lines--information for this period not maintained separately.

Suburban rail passenger service is provided under agreements between Penn Central Transportation Company (a Conrail predecessor) and MTA for rail service in New York and the Connecticut Department of Transportation (CDOT) for rail service in Connecticut. Conrail assumed the obligations of Penn Central, including suburban passenger service agreements, on April 1, 1976. Conrail is reimbursed for all operating deficits and certain other costs and receives an annual management fee totaling \$225,000 for providing suburban rail passenger service on the Harlem/Hudson and New Haven divisions.

COMMUTER AUTHORITIES' RESPONSIBILITIES

The two commuter authorities, MTA and CDOT, provide funds from Federal, State, and other sources for Conrail's Harlem/Hudson and New Haven divisions.

MTA and CDOT, as contractual parties with Conrail, are responsible for paying net operating deficits and

management fees; developing capital improvement programs; and approving service, revenue, and cost budgets. Although the authorities may perform safety inspections, Conrail is responsible for the day-to-day operations of the passenger service, as well as for complying with FRA safety regulations. Neither MTA nor CDOT determine Conrail's compliance with FRA safety regulations.

The two authorities and Conrail officials hold joint monthly policy meetings and frequently exchange management reports.

SCOPE OF REVIEW

Our review was directed primarily at determining whether Conrail was carrying out safety activities required by FRA regulations. This included such areas as track, signals and train control, equipment, and operating practices. In addition, we examined how well FRA was monitoring Conrail's compliance with these regulations. We did not evaluate the overall safety of Conrail's operations or compare Conrail's operations with other railroads' operations.

We also obtained from MTA and CDOT information on their responsibilities and funding for commuter rail services.

Our work included a review of records and discussion of activities for calendar year 1976. We selected this period because it was the latest period for which FRA inspection records were available. During this period commuter rail service was provided by Penn Central from January to March. Service was assumed by Conrail on April 1, 1976.

Our review was performed at these locations:

- FRA's offices in Washington, D.C.; Boston, Massachusetts; and Newark, New Jersey.
- Conrail's Metropolitan Region in New York, New York.
- MTA in New York, New York.
- CDOT in Wethersfield, Connecticut.

CHAPTER 2

IMPROVEMENTS NEEDED TO CORRECT

INADEQUACIES IN CONRAIL SAFETY ACTIVITIES

Conrail is not conducting fully the required FRA safety activities. Our examination of records showed that Conrail

--was not making most required safety inspections and

--did not show corrective action taken on deficiencies noted.

In addition, Conrail's records did not contain sufficient information to permit an assessment of the overall safety of Conrail's commuter operations.

As noted previously, Conrail began operating the former Penn Central services on April 1, 1976. This chapter thus covers some Penn Central activities, as well as Conrail activities.

SAFETY REQUIREMENTS

FRA has established safety regulations for track, equipment, signals and train control, and operating practices. Conrail's responsibilities under these regulations include inspecting track, equipment, and signal systems; complying with employee hours of service and operating rules; reporting and investigating railroad accidents/incidents; and keeping records on these activities.

Accidents/incidents must be reported monthly to FRA. An accident/incident can include:

--Any impact between railroad ontrack equipment and an automobile, a bus, a truck, a motorcycle, a bicycle, a farm vehicle, or a pedestrian at a rail highway grade crossing.

--Any collision, derailment, fire, explosion, act of God, or other event involving operation of railroad ontrack equipment which results in more than \$2,300 in damage to ontrack equipment, signals, track, track structures, and roadbed.

--Any event arising from railroad operation resulting in the death of one or more persons, injury to one or more persons requiring medical treatment, or loss of work or occupational illness to one or more employees.

During calendar year 1976 and the first quarter of 1977, there were 34 accidents/incidents involving commuter rail activities on the Harlem/Hudson and New Haven divisions. This total does not include accidents/incidents where Conrail's operations were not a causal factor, such as incidents involving trespassers.

TRACK

FRA regulations (49 C.F.R. 213) establish the nature and frequency of inspection requirements for track, switches, and rail. The regulations exclude track used exclusively for commuter services, but they apply to Conrail because freight and long haul passenger trains also use the tracks.

These regulations state that all track must be inspected twice weekly by walking or riding over the track in a vehicle at a speed that allows the inspector to visually inspect the track structure for compliance with standards. Some track elements included in the requirement are roadbed and the areas adjacent to it; gage, alinement, and surface of track; the elevation of outer rails; ballast; crossties; track assembly fittings; and the physical condition of rails. The regulations also require that each switch be inspected on foot at least monthly and that at least once a year a continuous search for internal defects be made of all jointed and welded rails over which passenger trains operate.

The Harlem/Hudson and New Haven divisions have about 663 passenger track miles subject to the prescribed track and rail inspections and about 872 main switches subject to inspection.

Our review of Conrail's records was based on statistical samples. (App. III describes our sampling method.)

According to our statistical sample of Conrail's daily track inspection reports, 69 percent of the prescribed track inspections were not performed at the required frequency. When inspections were made, the records did not indicate any corrective action taken for 63 percent of the defects noted.

Conrail conducts switch inspections at interlocking stations. 1/ The two divisions of Conrail's Metropolitan Region have 32 interlocking stations containing about 872 main switches.

Our statistical sample of monthly switch inspection and test reports for 26 interlocking stations showed that 41 percent of the monthly inspections has not been completely performed in accordance with the required frequency.

The 6 interlocking stations at GCT contain 355 switches. Our review of all monthly GCT inspection reports showed that 65 percent of the monthly inspections had not been completely performed in accordance with the required frequency.

Conrail had recorded 70 instances of switch defects but in every instance the records did not indicate any corrective action taken.

Conrail performs the required annual inspections using the Sperry Rail Service, a contract service which checks for defects in the rails. Two reports were generated by this service:

- The car movement report, which depicts the mileposts covered.
- The defective rail report, which indicates defective rail and joints on the mileposts covered.

These reports showed that all mile segments of rail had been inspected.

1/An interlocking station is a tower which contains the controls for a number of switches.

During our review Conrail identified some element of track 1/ as the primary cause of six reported accidents/incidents. In two of these a prior inspection report noted a deficiency, and this uncorrected deficiency contributed to a subsequent accident/incident. In a third case Conrail made a temporary repair of a catenary deficiency, but the temporary repair failed.

For example, a June 18, 1976, inspection report of a certain switch noted that corrective action was needed because ties were needed and the switch points were worn and chipped. Conrail's records showed that no corrective action had been taken, and on June 30, 1976, a train derailed because the switch point broke under movement.

EQUIPMENT

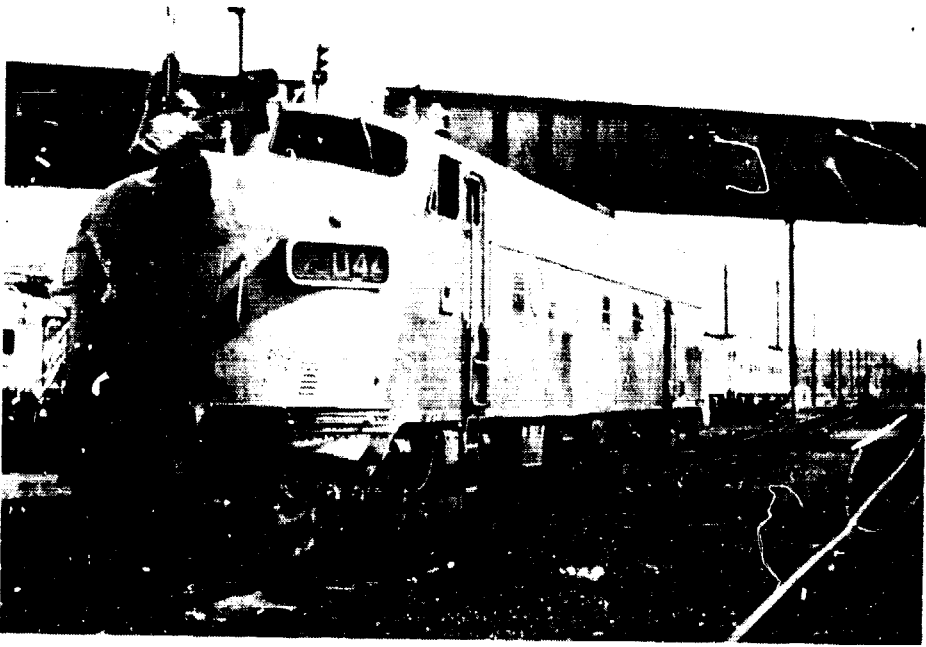
The Locomotive Inspection Act (45 U.S.C. 22-34) provides the basis for the FRA locomotive inspection regulations (49 C.F.R. 230). These regulations for diesel locomotives, self-propelled rail cars, and multiple operated electric units (commuter locomotives--see photographs on pp. 9 and 10) require in part that

- locomotive units be inspected at least once every 30 days;
- during the 6 months beginning with January and July of each year, the date and place of each inspection performed be recorded and attested to by the inspector and his supervisor; and
- in January and July of each year, the form covering the previous 6 months' inspections be removed from the cab of each locomotive unit, certified before a notary public by the railroad official responsible for the unit, and filed with FRA.

The monthly inspections include such items as

- brakes,

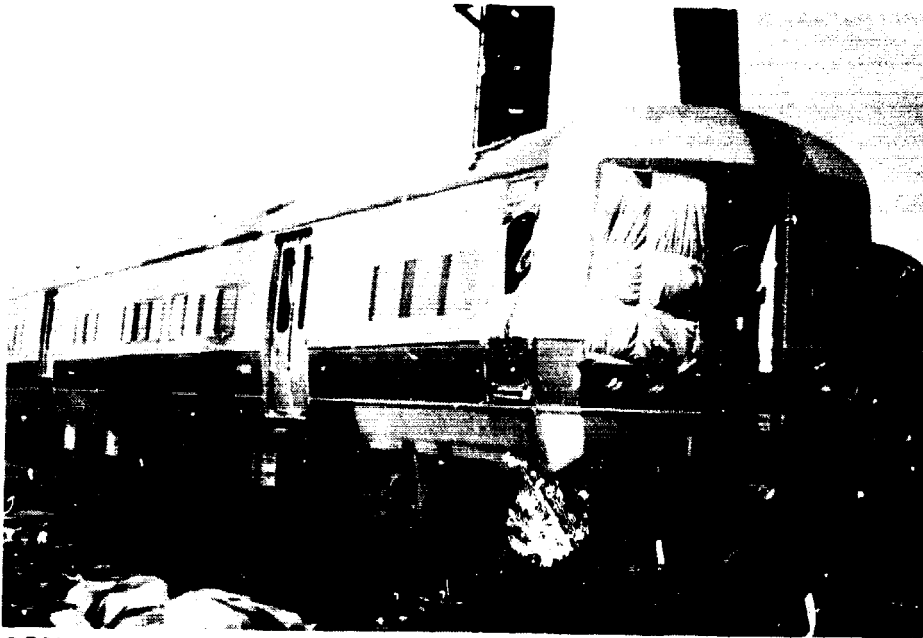
1/ FRA instructions for preparing accident/incident reports include the catenary system--overhead wires which provide electric power for trains--in the category of track. FRA does not have inspection requirements for catenary systems.



CONRAIL DIESEL LOCOMOTIVE USED IN COMMUTER SERVICE



CONRAIL SELF-PROPELLED RAIL CAR USED IN COMMUTER SERVICE



CONRAIL MULTIPLE OPERATED ELECTRIC UNIT AWAITING REPAIRS AT SHOP

- signals,
- control equipment, and
- current collectors.

During 1976, 645 locomotives were used on Conrail's passenger divisions which were subject to the inspection requirements. During the same period Conrail identified equipment as the primary cause of 17 reported accidents/incidents.

Conrail also makes daily visual inspections, as required by FRA. We concentrated on the monthly inspections because they were comprehensive inspections, as opposed to the daily inspections, which are only visual walkaround inspections.

Our review of Conrail's records of monthly inspections showed Conrail was inspecting its equipment within the FRA standard time frame (30 days), with minor exceptions. In nine instances (7 percent of our sample) equipment was inspected beyond the 30-day time frame. Of these, two were recorded and reported to FRA as out of service (not to be used in service) until the monthly inspection had

been conducted. But Conrail actually used these two units when they were supposed to be out of service, a practice expressly prohibited by FRA.

We believe Conrail's records on equipment inspections should be improved to enable a meaningful assessment of the effectiveness of the inspections and to identify trends in equipment defects, although this is not required by FRA's regulations.

The records do not reflect the safety defects noted, the repairs required, or the corrective action taken. They do not

- state the condition of the equipment upon entering the "car shop" for its monthly inspection or

- indicate the degree or quality of the inspection.

They indicate only the date of inspection and the signatures of an inspector and supervisor. Even the supporting documentation (report of each test) of the inspection reveals only a signature of the craftsman who performed the work. Conrail's shop foreman stated these signatures and the certifying signature of the shop foreman are supposed to indicate the equipment has been inspected, repaired, and ready for service.

Because of the type of information in Conrail's records, the effectiveness of Conrail's monthly equipment inspections cannot be independently assessed.

SIGNALS AND TRAIN CONTROL

FRA regulations (49 C.F.R 236) require that inspections and tests of signal apparatus reflect the name of the railroad, the place, the date, the equipment tested, repairs, replacements, adjustments, the condition in which the apparatus was left, and the signature of employee making the test.

Conrail's instructions for testing signal apparatus require that the inspection records

- list the frequency of the test,

- list the test number,

- give the name of the interlocking station, and
- report the condition.

Conrail's Metropolitan Region with its 26 interlocking stations and GCT contain about 1,396 signal apparatus subject to 37 different tests ranging in frequency from weekly to every 8 years. Three tests are labeled "as required." These tests are subject to the above recordkeeping requirements.

Conrail's records indicate the specific test performed in the territory covered by the entire interlocking station. They do not indicate the specific signal tested or its condition; therefore, the railroad or anyone reviewing these records could not determine when a specific signal was last inspected or its condition. What can be determined is that an interlocking has been inspected (GCT interlockings contain as many as 442 signals), and the assumption is that all signals within the interlocking were inspected for a specific test.

OPERATING PRACTICES

Railroad operating practices are governed by FRA regulations (49 C.F.R 217 and 228). Sections 217.9 and 217.11 specify that

- the railroad shall periodically conduct operational tests and inspections to determine the extent of compliance with its code of operating rules, timetables, and special instructions in accordance with a program filed with FRA and
- to insure each railroad employee whose activities are governed by the railroad's operating rules understands those rules, the railroad shall periodically instruct that employee on the meaning and application of the railroad's operating rules in accordance with the program filed with FRA.

Section 228.19 requires the monthly reporting to FRA of excessive on-duty time of railroad employees actually engaged in or connected with movement of trains.

Conrail's procedures state that employees whose duties require them to be familiar with the operating rules, timetables, and special instructions must pass a satisfactory examination within 6 months after entering service and be reexamined annually.

These annual examinations are neither graded nor evaluated; neither action is required by FRA regulations. We believe that, as a result, Conrail does not have an effective measure to determine how well its employees understand its operating rules.

Operating rules

A July 1977 computer printout, which lists about 2,800 Conrail employees subject to the examination requirement and their last annual rules examination date, revealed that 205 employees had not been examined in the past year. Conrail's Assistant Manager of Operating Rules satisfactorily explained why some of these employees had not been tested, but in other instances, he was unable to offer any explanation.

Hours of service

Conrail is complying with the Hours of Service Law according to our review sample of 60 employees' weekly time and labor distribution cards, except in two instances when the employees worked over 9 hours a day and were not reported to FRA.

During the period we reviewed, human factors were identified by Conrail as the primary cause of seven accidents/incidents. Our analysis revealed that in six of the seven instances, there was a direct cause/effect relationship between failure by a Conrail employee to comply with an operating procedure and the subsequent accident/incident. For example, on July 13, 1976, a train collision at New Canaan, Connecticut, resulting in deaths of two passengers, was caused by the failure of the engineman to control the speed of his train in accordance with the signal indication.

The remaining instance involved a truck-train collision at a private crossing, but Conrail does not have any operating rules governing private crossings. Conrail officials told us that a private party assumes the risk in using private crossings.

CONCLUSIONS

FRA has placed primary track safety inspection responsibility on Conrail, and Conrail is not adequately discharging this responsibility because it

--failed to inspect track and switches at required intervals and

--failed to conduct followup inspections or take corrective action where deficiencies were noted on inspections.

Conrail is generally inspecting equipment within the FRA required time frame (30 days). However, the documents involved do not reflect the safety defects, the repairs required, or the corrective action taken. Therefore, it is not possible for GAO, FRA, or Conrail to make a meaningful assessment of the effectiveness of these monthly inspections or identify trends in equipment breakdowns.

By failing to evaluate or grade employee annual examinations concerning operating practices, Conrail does not have an effective measure to determine how well its employees understand its operating rules.

CONRAIL'S COMMENTS AND OUR EVALUATION

Conrail commented (see app. IV) that:

--Our report did not evaluate its safety performance and to suggest that Conrail is operating unsafely would be misleading.

--The period covered included 3 months before the establishment of Conrail and many improvements have since been made in Conrail's methods of doing things.

--Our work was constructive and it was carefully considering our suggestions for improving its recordkeeping procedures.

Conrail, however, disagreed with some of our conclusions. Conrail's specific objections are discussed below.

Switch inspections

According to Conrail, its review of switch inspections for 1976 showed that only 14 percent had not been performed as required, instead of the 41 percent we had found. During discussions with Conrail officials about our draft report, they gave us documents to support their position. These documents, however, were personal "records" kept by a Conrail employee and were not in Conrail's files. More importantly, these "records" covered only the signal apparatus associated with the switches and in no way represented a complete inspection of the switches in question.

Conrail attributed the differences between its results and ours to a difference in examination techniques. We do not agree. As noted above, the "records" submitted by Conrail did not demonstrate that more switches had been inspected than we had found. The 41-percent failure rate we developed was a statistical projection based on a sampling of interlocking stations. Included in the 41 percent are cases where no switches were inspected and others where some but not all switches at an interlocking had been inspected. The following table breaks down our sample results.

	<u>Sample of 26 interlocking stations</u>	<u>Complete test of GCT interlocking stations</u>
Percent where no switches were inspected	43.3	38.9
Percent where some but not all switches were inspected	8.3	26.4

Conrail stated that its performance of switch inspections had improved after the period covered by our review and that 100 percent compliance was achieved by September and for the balance of 1977.

Track inspections

According to Conrail, its examination of 1976 track inspection records showed an average of 70 percent of the required inspections had been made. This equals a failure rate of 30 percent, as contrasted to the 69 percent we found. Conrail stated that compliance with reporting requirements had risen to 99 percent by March 1977 as inspection and document control procedures were improved.

As shown in appendix III, our sample of track inspections was based on work gang inspection territories for specific weeks. If the selected gangs did not perform a required inspection or did not make a complete inspection, we classified it as a failure to make a required inspection. During discussions with Conrail officials about our draft report, they explained how they had arrived at their failure percentage and presented supporting documents. This information showed that if any part of a given section of track had been inspected, no matter how small, this had been counted as a complete inspection. We do not consider Conrail's position valid.

According to Conrail, its sample of records showed all FRA defects had been corrected and it believed we had included nondefective conditions in drawing our conclusions. Conrail's belief is inaccurate. The only defects included in our report were those shown on Conrail's inspection reports under this caption: "THE FOLLOWING DEFECTS WERE FOUND AND ARE IN NEED OF CORRECTION." We believe this caption speaks for itself.

Grading of annual employee examinations

Conrail stated that safety classes are conducted annually and attendance is compulsory. Grades of at least 85 percent are required for promotion, and spot examinations are made by field supervisors.

Our point is that Conrail does not grade the annual rules examination and so Conrail cannot effectively determine how well its employees understand the safety rules. Conrail has not really disputed this point since the grade of 85 percent applies to examinations given only to employees who apply for promotion and has nothing to do with the annual rules examinations. During discussions with Conrail officials about our report, they agreed that the annual rules examinations are not graded.

Number of employees not examined

In the year ended July 1977, we found that 205 employees were not examined, and Conrail satisfactorily explained why some had not been tested. Conrail disputed the accuracy of the number, but its comments are confusing and it is difficult to determine how many employees Conrail claims were not examined.

In any case, the specific number is not really important because our point is that not all Conrail employees subject to examination were in fact examined within the prescribed time frame. Conrail does not dispute this fact, and its comments indicate that corrective action has been taken.

Cause/effect relationship of accidents/incidents

Conrail did not agree that there is a cause/effect relationship between two accidents/incidents and prior inspection/correction practices at the locations involved.

Concerning one incident, involving a derailment on May 5, 1976, Conrail said that the previous monthly inspection made on April 2, 1976, had revealed the switch to be in fair condition. The inspection report included remarks relating to engine burns and tamping, but Conrail contends there was no indication from this report that the switch point was defective. Conrail contended that we took the designation "fair" to mean a defect existed, which Conrail said is not the case.

Conrail said that the work "fair" as used in switch inspections connotes a condition being adequate and quite safe, yet should be considered for attention. Conrail also contends that the piece was newly broken.

While we cannot determine whether the piece that broke was in fact newly broken, we disagree with Conrail's comments on the condition of the switch disclosed by the inspection report. The report shows the condition of the point as a circled F, which Conrail elsewhere in its comments defines as being a condition where corrective action would be required in the near future. This designation had been made by the inspector over a month before the derailment occurred. A February 1976 inspection report on this same switch noted that the left-hand switch point was chipped.

In the second incident, involving a derailment on June 30, 1976, Conrail contended that a June 18, 1976, inspection report indicated that corrective action would be required at this location in the near future (a circled F rating) but that there was no indication that its serviceability would not continue in the interim. Conrail's comments did not show that this inspection report also showed that the left-hand switch point was chipped. We believe correction of the deficiencies noted might have prevented the derailment.

RECOMMENDATIONS TO CONRAIL'S
CHAIRMAN OF THE BOARD

To help assure the public that Conrail is meeting its responsibility for operating a safe and reliable commuter railroad and is contributing to the improved safety record for the railroad industry, we recommend that Conrail:

- Adhere to the required FRA standards concerning inspection of track and switches and require its track supervisors to be accountable for followup inspections to assure that corrective action is taken on deficiencies noted.
- Keep adequate records on the 30-day equipment inspections to assure itself of the condition of its equipment and the effectiveness of these inspections.

--Grade or evaluate employees' test results to determine whether employees know the operating rules.

CHAPTER 3

FRA SHOULD ADOPT A MORE EFFECTIVE ROLE

IN MONITORING COMMUTER SAFETY

FRA has not been effective in its regulatory role because it has not adequately monitored Conrail's safety activities. FRA has conducted inspections supplemental to Conrail's, but this practice is ineffective because of

- limited territorial coverage,
- limited inspection followup,
- Conrail's failure to correct reported deficiencies, and
- Conrail's failure to keep required records of inspection.

The FRA staff whose territories encompass Conrail's Metropolitan Region Harlem/Hudson and New Haven divisions are located at the Newark District Office which is under the Boston Area Office. Four field inspectors and one supervisor at this district office are responsible for seeing that Conrail and other railroads in their jurisdiction comply with Federal safety standards. An additional signal inspector in Albany works in the New York area on the Harlem/Hudson division.

Each field inspector's territorial boundaries include east, west, north, and south sections of New York State (extending to the Canadian border), the State of New Jersey, the State of Connecticut, and northeastern Pennsylvania. FRA officials told us that because of the size of the territories and the number of railroads that come under their jurisdiction, the inspectors do not follow a prescribed inspection or monitoring schedule.

THE FEDERAL RAILROAD SAFETY AUTHORIZATION ACT OF 1976

The Federal Railroad Safety Authorization Act of 1976 (Public Law 94-348, July 8, 1976) authorizes FRA to have a maximum of 500 safety inspectors, 45 signal and train control inspectors, and 110 clerical personnel

in its Office of Safety. The Senate Committee on Appropriations, in its report on FRA's fiscal year 1977 appropriations, directed FRA to make every effort to fill all the positions authorized for this activity. However, FRA's end-of-the-year employment ceilings for the past few years have been:

<u>FY</u>	<u>End-of-the-year employment ceiling</u>
1978	382
1977	<u>a/358</u>
1976	371

a/ Decrease was due to transfer of 26 positions to other FRA offices and a reduction to reflect a more accurate relationship between authorized positions and end-of-the-year employment ceilings.

FRA records indicate that it has requested fairly substantial increases in personnel over the past few years, but that the Office of the Secretary of Transportation (OST) and the Office of Management and Budget (OMB) have significantly reduced FRA's requests to the Congress. For instance, in fiscal year 1976, FRA requested 154 additional positions; OST disallowed 74 and OMB disallowed 39, resulting in a request to the Congress for 41 additional positions. Conversely, the Congress added an additional 17 positions during the appropriation process, which resulted in a net increase of 58 positions. OMB then established a very low employment ceiling which did not allow FRA to fill 58 of the 429 authorized positions in fiscal year 1976.

According to FRA, OST and OMB limit its requests for additional positions because only limited resources are available to the Department of Transportation and they must be allocated among the many different programs. In addition, OMB employment ceilings limit the number of authorized positions which FRA may fill. Although FRA said it could effectively use additional personnel in the field and in headquarters, OST and OMB may not allow any substantial staffing increases.

RESULTS OF FRA INSPECTIONS

FRA inspected track, equipment, and signals during 1976. These inspections are similar to Conrail's. The results of these inspections follow.

Track

During 1976 the FRA track safety specialist conducted 18 inspections covering 62 percent of the total trackage in Conrail's Harlem/Hudson and New Haven divisions. Inspection reports indicated 186 defects, including defective ties, missing bolts, loose rail braces, and insufficient ballast. Carriers are required to report corrective action taken to FRA. Conrail reported no corrective action for 17 percent of the 186 defects. For 155 defects which included Conrail's reported corrective action, our analysis of FRA records showed 29 percent had not been reported as repaired within the required 30 days.

Equipment

During 1976 the FRA motive power and equipment specialist conducted 30 inspections, which included only 38 percent of the Harlem/Hudson and New Haven division equipment. The inspection reports revealed 140 defects, including whistle not operating, improperly aligned brake shoe, accumulation of oil and debris on fuel tank, and leaking steam generator water storage tank. Our analysis of the records showed no Conrail corrective action for 54 percent of the defects.

Signals and switches

The signals specialist conducted five inspections during 1976, which included 2 percent of the signals and 4 percent of the switches on the Harlem/Hudson and New Haven divisions. The inspection reports revealed eight defects but did not show any corrective action taken reported by Conrail. Some of the defects included insulated wires not protected and loose braces and switch plate.

Followup

In all but one of the inspections performed during 1976, FRA did not followup to determine if Conrail was correcting the defects noted. In the one instance when FRA did followup, it resulted in a violation because Conrail never corrected the deficiency even though it had reported to FRA that it had.

PRIOR GAO REPORT

On April 11, 1975, we reported to the Secretary of Transportation on "FRA Safety-Related Activities Pursuant to the Federal Railroad Safety Act of 1970" (B-164497). That report contained findings similar to those described above. Before issuing that report, we discussed our findings with the FRA Deputy Associate Administrator, Office of Safety, and other FRA officials. They said FRA intended the field inspectors to monitor, rather than perform supplementary inspections, and, in fact, the field inspectors' training had emphasized monitoring.

FRA officials also told us a "crash safety program" was being prepared for release within the next few weeks for public and industry comment. They said the program would essentially correct the type of operational deficiencies we had found; would improve FRA's overall monitoring of the railroads' safety programs; and, in the long run, would contribute to an improved safety record for the railroad industry.

Our current review indicates FRA has made no progress for about 2 years. On December 20, 1977, an FRA official told us that a new safety program had not yet been implemented because of problems in getting it approved by OST.

CONCLUSIONS

Our examination of FRA records indicates that it has been enforcing its safety regulations by performing supplementary inspections. These have not been effective because of

- limited territorial coverage,
- limited inspection followup, and
- Conrail's failure to correct reported deficiencies.

FRA can more effectively use its limited resources if it adopted a monitoring role, which would enable FRA to systematically determine

- the quality and timeliness of Conrail inspections,
- whether safety defects are being reported, and
- whether corrective actions are being taken.

If FRA inspectors concentrated on monitoring the railroad's activities instead of making independent inspections, they would be more aware of deviations from FRA safety requirements and give the railroad an incentive to conduct required inspections and keep records on them.

Our current findings are similar to those we reported in 1975. Progress has not been made.

RECOMMENDATIONS TO THE SECRETARY OF TRANSPORTATION

We recommend that FRA monitor Conrail compliance with FRA safety regulations rather than only conduct inspections supplementary to Conrail's. Such monitoring should include examinations of Conrail's records to see how well the carrier has adhered to FRA safety, inspection, and recordkeeping requirements.

AGENCY COMMENTS AND OUR EVALUATION

The Department of Transportation informed us (see app. V) that:

- As a result of our findings, instructions had been issued to FRA's Newark and Boston offices emphasizing the importance of followup inspections.
- All instances of Conrail's failure to correct reported deficiencies would be verified, including the validity of Conrail's inspection records, and appropriate action would be taken.
- While FRA's plan of improvement (see p. 23) had been submitted to OST and later to OMB for review, there was no intention that FRA defer any action to strengthen its safety activities. To the Department's knowledge, this review had not delayed FRA's safety efforts.

Concerning our recommendation that FRA monitor Conrail's compliance with FRA's safety requirements, the Department stated that FRA monitoring involves an overview of all carrier safety activities and that FRA inspectors do review the carrier's inspection records. According to the Department, field inspections complement inspections of carrier's records and neither is valid or useful without the other. The Department said that it is vital that an inspector evaluate the condition of a sample of the items being inspected.

Inspections can be an important part of an overall monitoring program. However, our review showed that FRA's surveillance with respect to Conrail was limited almost exclusively to supplementary inspections, with no real monitoring of Conrail's performance through a review of Conrail's records for compliance with FRA requirements. This limitation was further aggravated by FRA's failure to adequately follow up on the deficiencies found in its inspections. We agree that effective monitoring should include both inspections and a review of records. This is why we recommend that FRA monitor Conrail's activities by including an examination of Conrail's records and not only by conducting supplementary inspections.

Conrail also commented on the findings in this chapter relating to its failure to correct deficiencies noted during FRA inspections. Conrail said that it did not have access to FRA's records, but that it had reviewed its equipment and signal inspection files and could not find any instances of the discrepancies we noted. (Conrail did not comment on track and switch deficiencies.)

Our work on the FRA inspections involved reviewing Conrail's records, as well as FRA's records, and our findings therefore apply to Conrail's records too.

CHAPTER 4

FUNDING FOR SAFETY

Federal and State funds are provided for operating costs and capital improvements but are not earmarked for safety activities. These funds are provided by the respective operating authorities, MTA and CDOT. Conrail, MTA, and CDOT told us that they do not maintain financial records for safety activities and so we could not identify specific funding for safety. This chapter includes information on State and Federal funding for operating costs and capital improvements.

OPERATING COSTS

Conrail's operating costs are subsidized by MTA and CDOT. The total paid for operating deficits on the Harlem/Hudson and New Haven divisions was \$181.3 million. These funds cover the period June 1972 to December 1976 on the Harlem/Hudson division and January 1971 to December 1976 on the New Haven division.

A Federal transit operating assistance grant administered by the Department of Transportation's Urban Mass Transportation Administration (UMTA) became available on November 26, 1974. Between that date and December 31, 1976, the two authorities were awarded \$52 million for all their commuter rail activities. These grants included operations on the Harlem/Hudson and New Haven divisions, but no specific amounts are designated for use on these divisions.

CAPITAL IMPROVEMENTS

About \$348.4 million from Federal, State, and other sources has been made available for capital improvements from 1970 to December 1976 on the Harlem/Hudson and New Haven divisions. The Federal share was \$158.3 million, or about 45 percent, and included five UMTA capital grants and UMTA's share of five Tri-State Regional Planning Commission technical study grants. Of the \$348.4 million, \$281.2 million was spent as of December 1976 as follows:

	<u>Amount</u>
	(millions)
--Paid directly to Conrail or its predecessor, Penn Central	\$45.1
--Purchase of multiple unit cars and third party contracts for various passenger service improve- ments	<u>236.1</u>
	<u>\$281.2</u>

The types of activities funded included acquisition of commuter cars and a modernization and rehabilitation program involving:

- track and signals,
- equipment,
- electrification and communication systems,
- station improvements,
- bridges and structures, and
- shop and yard facilities.

APPENDIX I

APPENDIX I

NINETY-FOURTH CONGRESS

FRED B. ROONEY, PA., CHAIRMAN

BROCK ADAMS, WASH.
RALPH H. MEYCALFE, ILL.
JIM SANTINI, NEV.
JAMES J. FLORIO, N.J.
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HARLEY G. STAGGERS, W. VA.
(EX OFFICIO)

JOE BROWNE, KANS.
EDWARD R. MADONAN, ILL.
SAMUEL L. DEVINE, OHIO
(EX OFFICIO)

CONGRESS OF THE UNITED STATES
HOUSE OF REPRESENTATIVES
SUBCOMMITTEE ON TRANSPORTATION AND COMMERCE
OF THE
COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE
WASHINGTON, D.C. 20515

ROOM 5147
HOUSE OFFICE BUILDING ANNEX NO. 2
PHONE (202) 225-1487

WILLIAM T. OUSMAN
STAFF DIRECTOR
WILLIAM L. ROY/CS
CHIEF CLERK

February 14, 1977

The Honorable Elmer B. Staats
Comptroller General of the United States
General Accounting Office
441 "G" Street, N. W.
Washington, D. C. 20548

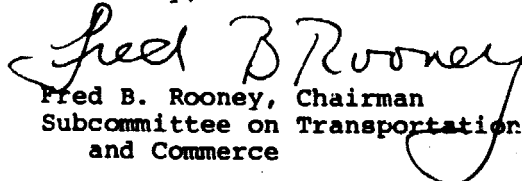
Dear Mr. Staats:

As Chairman of the House Subcommittee having jurisdiction over railroad safety, I respectfully request your office to conduct a study of the safety-related activities of Conrail's commuter operations. The study should focus on commuter operations serving the New York metropolitan area, as explained in the enclosed letter from Congressman Ottinger.

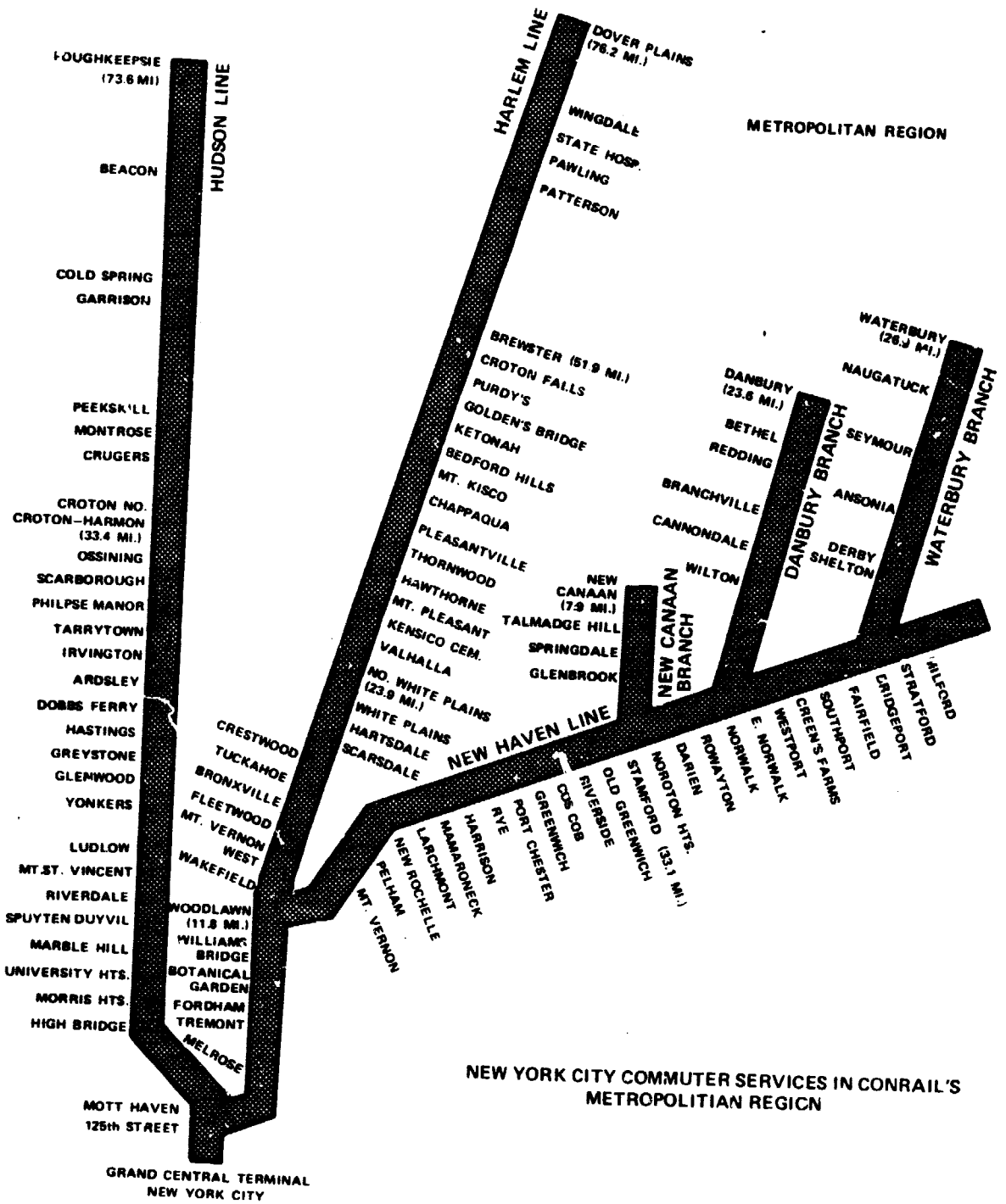
The Federal Railroad Safety Authorization Act of 1976 provides that the Office of Technology Assessment conduct a study of the Federal Railroad Safety Act of 1970 and related federal laws, to evaluate their effectiveness in improving the safety of our nation's railroads. OTA, however, is limiting its study to freight service. Further, this Subcommittee is currently preparing for oversight hearings on Amtrak. An integral part of these hearings will relate to Amtrak safety. Therefore, I am requesting your office to conduct a study of commuter service safety, as it is the one area of rail service which is not included in current Congressional investigations.

Your assistance in this regard will be greatly appreciated.

Sincerely,


Fred B. Rooney, Chairman
Subcommittee on Transportation
and Commerce

Enclosure



STATISTICAL SAMPLING METHODS FOR
TRACK, SWITCH, AND RAIL INSPECTIONS

TRACK

There are 14 track inspection and repair subdivisions, each with a gang responsible for a required (biweekly) track inspection. This equates to a total universe of 728 weeks of inspection activity (14 X 52). Our random sample included 60 weekly periods, each of which included an assigned gang and the specific week. For each sample item we determined whether the gang had inspected all track in their territory twice during that week.

SWITCHES

Switches are required to be inspected monthly, and inspection records are prepared by interlocking station. We identified 32 interlocking stations on the Harlem/Hudson and New Haven divisions. For 26 of these interlockings we identified a total universe of 312 interlockings to be inspected during the year (26 X 12). Our random sample included 60 monthly inspections of interlocking stations. We then identified the number of switches included in each of the sample interlockings and determined from available records whether each of these switches had been inspected during that month. For the remaining six interlocking stations (GCT) we reviewed all monthly inspection reports in the same manner.

RAIL

There are 663 miles of rail lines on the Harlem/Hudson and New Haven divisions that must be inspected annually. Our random sample included sixty 1-mile segments of rail. We determined from available records whether each of these segments had been inspected.

CONRAIL

EDWARD G. JORDAN
CHAIRMAN
CHIEF EXECUTIVE
OFFICER

February 16, 1978

Mr. Henry Eschwege, Director
United States General Accounting Office
Washington, D. C. 20548

Dear Mr. Eschwege:

Enclosed is our response to be included in the final draft of the GAO report entitled, "Commuter Railroad Safety Activities on Conrail's Lines in New York Should Be Improved."

During the last two weeks Mr. Charles Riche and other GAO representatives have met three times with members of Conrail's staff and operating groups to resolve many of the issues I expressed concern about in my February 1 letter to you. We appreciate their time and effort in so doing.

It is important to emphasize that the report does not attempt to evaluate the safety performance of Conrail's commuter lines in New York but had as its objective to determine whether or not inspection and reporting requirements required by the Federal Railroad Administration were being fulfilled. As indicated, it would be misleading to suggest on the basis of this report that Conrail is operating unsafely in the New York area or anywhere else.

As you know, the period studied was 1976, including three months prior to the establishment of Conrail. As pointed out in the attached comments, many improvements have been made in Conrail's methods of doing things since that time.

Mr. Henry Eschwege

February 16, 1978

While disagreement is expressed with some of the conclusions drawn by the report, the study has been constructive and has recommended additional improvements in Conrail's present record-keeping procedures.

Should additional information be required, I know that Mr. K. E. Smith, General Manager of Conrail's Metropolitan Region, stands ready to help in any way he can.

Sincerely,

A handwritten signature in black ink, appearing to read "Edward J. Anderson". The signature is written in a cursive style with a large, prominent initial "E".

COMMENTS ON A GAO REPORT ENTITLED
"COMMUTER RAILROAD SAFETY ACTIVITIES ON
CONRAIL'S LINES IN NEW YORK SHOULD BE IMPROVED"

It should be emphasized that safety activities were reviewed relying almost entirely on inspection records and that safety performance per se was not evaluated. The objective was to determine, based on these written records, whether or not the inspection and reporting requirements of the Federal Railroad Administration were being complied with fully during 1976, including three months of time prior to conveyance of the rail properties to Conrail, a period when Conrail had no responsibility.

It is important to point out that any imperfections in record-keeping or inspection practices that may have existed previously have been corrected and that compliance with FRA requirements can be documented. It would be unfair and misleading to suggest on the basis of this report that Conrail is operating an unsafe railroad in the Metropolitan New York area.

At the same time we believe that the study has been beneficial. Suggestions made for improving Conrail's record-keeping procedures are constructive and are being carefully considered.

While numerous issues contained in the original draft of the report have been resolved, we wish to reflect our position on some remaining points on which we feel quite strongly.

1. The report states that GAO's statistical sample "showed that 41 per cent of the monthly (switch) inspections were not performed in accordance with the required frequency."

Conrail's review of switch inspections for 1976 revealed deficiencies in available records but indicated that 86% were performed as required, not 59% as reported by GAO.

The difference in these two results lies in the technique used in examining the records. While the Conrail study considered inspections on a switch-by-switch basis for the entire Metropolitan Region, GAO's method involved a sampling of interlockings, each of which contains a number of switches. By GAO's measurements, if an inspection record was lacking for any switch within the interlocking, this condition was considered to be a "failure" for the entire group

of switches or components. Thus the GAO's lower compliance number is reached.

It should be noted Conrail's study showed that an average 91% compliance during 1977 and that 100% compliance was achieved by September and for the balance of the year.

2. The report states that "69 per cent of the prescribed track inspections were not performed at the required frequency. Where inspections were made, we found that the records did not indicate any corrective action taken by Conrail for 68 per cent of the defects noted."

Conrail's examination of 1976 track inspection records indicates an average 70% of the required FRA track inspections were made. Again, as in the case of the switch inspection assessment, GAO's and Conrail's techniques were different. GAO sampled track inspection schedules while Conrail considered the entire track system. If in GAO's sample a part of a requirement was lacking, the entire requirement was considered unfulfilled. While we do not object to a sampling procedure, we do believe it is important that the implication is not left in the mind of the reader either that 69% of the track in the Metropolitan Region was not properly inspected, or that 69% of required records were not prepared.

We do not dispute that deficiencies did exist, particularly in record-keeping and particularly during the early months of 1976. But, again, we think it is important to emphasize that compliance with reporting requirements had risen to 99% as early as March of 1977, as inspection and document control procedures were improved.

With regard to GAO's statements about corrective actions to be taken, a sample of field copy records made by Conrail indicates that all FRA defects were corrected. Other non-defective conditions are typically noted by inspectors on report forms for which no remedial action is required either by FRA or Conrail. We believe GAO has included a substantial number of these conditions in drawing conclusions in this area.

In a related statement concerning FRA activities the report indicates that Conrail did not comply with FRA reporting requirements, according to the FRA records.

Although Conrail does not have access to FRA records and it is therefore difficult to give an appropriate response, Conrail did review its equipment and signal inspection files and it cannot find any instance of the discrepancies noted by the GAO team.

3. The draft report implies that Conrail's Metropolitan Region is lax in training its employees with regard to operating rules, timetable and special instructions, and it states that "These annual examinations are neither graded nor evaluated so Conrail does not have an effective measure to determine how well their employees understand the rules for conducting a safe railroad."

Annual safety classes are conducted, and attendance is compulsory for all Conrail operating employees. For the years 1976 and 1977, 46 employees were removed from service for not attending these classes and taking the examination.

A grade of at least 85 percent on the examination is required for promotion. Grades are not used in judging an employee's fitness to continue in his present position, since each employee, to maintain his employment, must know all operating rules, timetable and special instructions applicable to his "job". Spot examinations in the field are conducted by Conrail supervisory personnel as employees go about their duties on a daily basis. During the year 1976, 23,884 such examinations were made with 1,349 employees failing. As a result, 972 reprimands were issued, 345 employees received letters of caution and 32 employees were suspended from duty. We believe these results indicate the seriousness with which Conrail views these responsibilities.

4. The draft report states review of a computer print-out "revealed that 205 employees had not been examined in the past year."

An investigation of this matter showed that only 11 of 217 (not 205) employees shown on the printout had not completed the review and examination requirements within the time period set forth by Conrail (annual basis). There were another 134 employees who were not in compliance with the Metropolitan Region Policy, which requires this be completed annually, but also by an employee's birth date. This resulted from the implementation of the Metropolitan Region policy on February 1, 1976 and reflects the transitional period involved. As of December 31, 1977, this situation has been corrected and all employees are in compliance with Metropolitan Region standards.

5. We disagree that there was a cause/effect relationship between the two accidents/incidents cited in the report and prior inspection/correction practices at these locations.

The first of these involved a derailment at MO on May 5, 1976. This derailment occurred as Train 758 was moving from Track 6 to Track 8. The rear truck of the rear car (1133) derailed because a 30-foot lefthand 112# switch point broke under movement. The piece breaking out was 3 inches in length and one inch in depth. There were no injuries. The total repair cost was \$3,500.

Examination of the previous monthly switch inspection made during April, 1976, revealed this switch (No. 237) to be in "FAIR" condition. There were 10 other switches examined on that same report, all being listed in "FAIR" condition. There were some remarks relating to engine burns and tamping at the heel of the switch, but there was no indication from this report that the lefthand switch point was found to be defective.

Although GAO investigators took the word "FAIR" to mean that a defect existed, this is not the case. The word "FAIR" as used in switch inspections connotes a condition of being adequate, quite safe, yet should be considered for future attention to change the condition to "GOOD". The piece that broke out under movement was newly broken.

The second incident occurred on June 30, 1976, at Spuyten Duyvil as Train 727 moved from Track 2 to Track 15. The rear truck of the rear car (1113) derailed because of a 127# lefthand switch point that broke under movement. There were no injuries, and the total repair cost was \$2,500.

While an inspection report on June 18 did indicate corrective action would be required at this location in the near future (a circled "F", for "FAIR" rating) there was no indication that its serviceability would not continue in the interim. Otherwise a "P", for "POOR" rating would have been given and immediate action would have been taken.

We believe it is not possible to conclude that there is any direct cause/effect relationship between this inspection and the subsequent occurrence as claimed by the GAO.

February 16, 1978

Prepared by K. E. Smith
General Manager
Metropolitan Region
Conrail



ASSISTANT SECRETARY
FOR ADMINISTRATION

OFFICE OF THE SECRETARY OF TRANSPORTATION
WASHINGTON, D.C. 20590

February 3, 1978

Mr. Henry Eschwege
Director, Community and Economic
Development Division
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Eschwege:

In response to your letter of December 23, 1977, we are enclosing two copies of the Department's reply to the General Accounting Office (GAO) report "Computer Railroad Safety On Conrail's Lines in New York Should Be Improved."

In addition to the enclosed reply, we would like to address one other issue in the report. GAO indicates that the Federal Railroad Administration's (FRA) efforts to strengthen its safety program were hampered by delays in the Office of the Secretary in review of FRA's safety action plan. The plan was submitted to the Office of the Secretary and later to the Office of Management and Budget for review. However, there was no intention that FRA defer any action to strengthen its safety activities during the review period, and to our knowledge review of the plan has not delayed FRA's safety efforts.

We will be glad to furnish additional information upon request.

Sincerely,

A handwritten signature in black ink, appearing to read "E. W. Scott, Jr.", written in a cursive style.

for

Edward W. Scott, Jr.

Enclosure

DEPARTMENT OF TRANSPORTATION REPLYTO
GAO DRAFT REPORT ENTITLEDCOMMUTER RAILROAD SAFETY
ON CONRAIL'S LINES IN
NEW YORK SHOULD BE IMPROVEDSUMMARY OF GAO FINDINGS AND RECOMMENDATIONS

The General Accounting Office (GAO) reviewed commuter service operations in the Consolidated Rail Corporation's (Conrail) Metropolitan Region for calendar year 1976 and the first quarter of 1977. GAO found that Conrail was not conducting safety-related activities required by the Federal Railroad Administration (FRA) such as inspecting track at required intervals, conducting follow-up inspections or providing corrective action and not maintaining records to support such actions. GAO noted a direct cause/effect relationship between deficiencies in Conrail's inspection procedures and subsequent accidents. GAO made recommendations to Conrail to correct the inadequacies noted.

GAO noted that FRA is responsible for establishing railroad safety standards and assuring that carriers comply with them, but found it has been ineffective in its regulatory role because it has not adequately monitored Conrail's safety activities. GAO found that while FRA is conducting inspections similar to those conducted by Conrail, they have not been effective because of limited territorial coverage, limited inspection follow-up and Conrail's failure to correct reported deficiencies and maintain records of inspection.

GAO believes FRA could make better use of its limited resources by emphasizing monitoring which would enable it to determine on a systematic basis the quality and timeliness of Conrail inspections, whether safety defects are being reported, and whether needed corrective actions are being taken. GAO believes little or no improvement has occurred in FRA's monitoring of carrier performance since its last report issued in April 1975 despite FRA's promise of corrective action. GAO recommends that FRA improve its effectiveness by monitoring Conrail compliance with safety regulations rather than conducting inspections supplementary to Conrail's.

DEPARTMENT OF TRANSPORTATION POSITION STATEMENT

As to the specific GAO findings that FRA inspections covered only limited territory during 1976 (62 percent of the trackage, 38 percent of equipment, 2 percent of signals and 4 percent of switches) and involved limited follow-up, we acknowledge that our inspection force is small. As a result, the amount of coverage that can be devoted to commuter activities is limited, which in turn, restricts immediate follow-up inspections unless areas of imminent danger are involved. Routine follow-up inspections are effected as her duties will permit. We would like to point out that the draft report is slightly incorrect with respect to the number of inspectors monitoring Conrail. In addition to the four field inspectors and one supervisor, there is an additional signal inspector headquartered in Albany who also works in the New York area covering the Harlem and Hudson lines.

However, as a result of the findings made by GAO, instructions have been issued to the Newark and Boston offices emphasizing the importance of performing follow-up inspections. As to Conrail's failure to correct reported deficiencies (17 percent of track defects, 54 percent of equipment defects, and no corrective action for signal and switch defects), all such instances will be verified, including the validity of Conrail's records of inspection and appropriate action taken.

Concerning GAO's recommendation that FRA could make better use of its limited resources by monitoring instead of conducting supplementary inspections of Conrail's records, we believe there is some misunderstanding as to what "monitoring" entails. The FRA monitoring process involves an overview of all carrier safety activities related to our rules and regulations. FRA inspectors do review the carriers' records of inspections to determine whether the carriers are in fact making and properly recording their inspections. However, it is not possible to evaluate the adequacy of an inspection program merely by reviewing the records of the inspection.

It is vital that the inspector also evaluate the condition of a sample of the items being inspected to determine the reliability of the records and make an overall assessment as to whether the item is in safe condition for the service in which it is used. The field inspections complement the inspections of carriers' records and in our opinion neither is valid or useful without the other.