NATIONAL TRANSPORTATION SAFETY BOARD

WASHINGTON, D.C. 20594

RAILROAD ACCIDENT REPORTS

BRIEF FORMAT
ISSUE NUMBER 2 -- 1984

NTSB/RAB-85/06

UNITED STATES GOVERNMENT
16. Abstract

This publication contains briefs of selected railroad accidents occurring in U.S. Railroad operations during calendar 1984. The brief format presents basic facts, conditions, circumstances, and probable cause(s) in each instance. Additional statistical information is tabulated by types of accidents and casualties related to types of accidents, carriers involved, and causal factors.

Sequence Numbers:

82-162 84-17 84-88, 89, 90
82-175 84-64, 65 84-92
82-211 84-70 84-94
82-314 84-73 84-96
83-62 84-75 84-101 through 104
83-117 through 122 84-77 84-107, 108
83-133 84-79, 80 84-110
83-135 84-83
84-86

17. Key Words

Railroad Accident; Common Carrier; Probable Cause; Improper Operations Procedure; Collision; Derailment; Impending Accident; Train Speed; Failure of Person; Failure of Component; Causal Factor

18. Distribution Statement

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FOREWORD

The National Transportation Safety Board is an independent Federal agency that serves as the overseer of safety in railroad, highway, pipeline, marine, and civil aviation transportation. The Safety Board was created by the Transportation Act of 1966 at which time it functioned as an autonomous agency under the Department of Transportation. In 1974, Congress enacted the Independent Safety Board Act which established the Safety Board as a totally independent agency of the Federal Government and broadened the Board's investigative role in the surface modes of transportation.

Under the Independent Safety Board Act, the Board has the authority to investigate, determine the facts, conditions, circumstances, and probable cause(s) of accidents, issue safety recommendations, conduct special studies on transportation safety, assess techniques of accident investigation, evaluate effectiveness of other government agencies with respect to transportation safety, and evaluate the adequacy of safeguards and procedures for transporting hazardous materials.

In accordance with the provisions of the Independent Safety Board Act of 1974, the NTSB has determined the probable cause of the accidents reported herein.

This publication contains the reports of 37 U.S. railroad accidents arranged in alphabetical order by railroad company name and tabulations of selected accident information including (1) types of accidents by carrier, (2) types of accidents by state, (3) casualties by types of accident and classes of persons, and (4) causal factors arranged by categories, types and numbers of accidents. These brief format reports are published quarterly on a calendar year basis and mostly include summaries of field investigations conducted by the Board's six railroad field offices. (See figure 1.) The briefs also contain data extracted from reports of investigations of major accidents which may be distinguished from the field investigations by the reference to the published National Transportation Safety Board major accident report under the probable cause section.

Care should be taken in interpreting the data contained in the four tables as they reflect only a three-month period and thus do not reflect an accurate long-term statistical distribution. At the end of each calendar year, an annual review of railroad accident data is published which contains tables and graphs compiled from that year's accident data.

These Briefs are summaries of reports of the National Transportation Safety Board and are thereby subject to the limitation of 49 USC 1903(c):

No part of any report or reports of the Board, relating to any accident or the investigation thereof, shall be admitted as evidence or used in any suit or action for damages growing out of any matter mentioned in such report or reports.
For those readers who wish more detailed information, the original factual reports for both field and major accidents are on file in the Washington, D.C., office of the National Transportation Safety Board and may be examined. These reports will be reproduced for a fee covering reproduction cost and postage. Orders for material also are subject to a user charge by the Board for special services, and such charge will be included in the bill.

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Washington, D.C. 20594
National Transportation Safety Board

Railroad Field Offices

Effective June 1, 1984
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EXPLANATORY NOTES

Scope

The accidents included herein are those occurrences incidental to railroad operations which fall within the scope of Section 304 of the Independent Safety Board Act of 1974. As provided in that Section, the Board investigates and determines facts, conditions, circumstances, and probable cause of any railroad accident in which there is a fatality or substantial property damage, or which involves a passenger train. The following definitions, as set forth in Part 840 of the National Transportation Safety Board's regulations (49 CFR 840), effective April 1, 1978, and as amended August 14, 1980, are applicable.

Railroad - 840.2(a)

"Railroad" means any system of surface transportation of persons or property over rails. It includes, but is not limited to, line-haul freight and passenger-carrying railroads, and rapid transit, commuter, scenic, subway and elevated railways.

Accident - 840.2(b)

"Accident" means any collision, derailment, or explosion involving railroad trains, locomotives, and cars; or any other loss-causing event involving the operation of such railroad equipment that results in a fatality or the emergency evacuation of persons.

Joint Operations - 840.2(c)

"Joint Operations" means rail operations conducted on a track used jointly or in common by two or more railroads subject to this part, or operation of a train, locomotive, or car by one railroad over the track of another railroad.

Fatality 840.2(d)

"Fatality" means the death of a person either at the time an accident occurs or within 24 hours thereafter.

Substantial Damage - 840.3

"Substantial Damage" in nonfatal railroad accidents is defined as follows:

1. Damage of $150,000 or more to railroad and nonrailroad property; or
2. All accidents involving passenger trains.
Causes and Other Factors

In determining probable cause(s) of an accident, all facts, conditions, and circumstances are considered. The object is to ascertain those cause-effect relationships in the accident sequence about which action may be taken to prevent recurrence. Accordingly, for statistical purposes, where two or more causes or contributing factors exist in an accident, each is recorded with no attempt to establish a primary cause or factor. Therefore, in the causal factor tables, the figures shown may exceed the total number of accidents.
### Table 1:

**ACCIDENTS BY REPORTING RAILROAD AND TYPE**  
(*Figures below represent a 3 month period*)

<table>
<thead>
<tr>
<th>REPORTING RAILROAD</th>
<th>COLLISION</th>
<th>DERAILMENT</th>
<th>EMPLOYEE FATALITY</th>
<th>PERSONAL FATALITY</th>
<th>GRADE CROSSING</th>
<th>TOTAL</th>
<th>HAZ. MAT. (1) INVOLVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMTRAK</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
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<tr>
<td>ATCHISON TOPEKA AND SANTA FE RR CO.</td>
<td>1</td>
<td>0</td>
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<td>BURLINGTON NORTHERN INC.</td>
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<td>2</td>
<td>0</td>
<td>0</td>
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<td>7</td>
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<tr>
<td>CHESAPEAKE AND OHIO RR CO.</td>
<td>0</td>
<td>1</td>
<td>0</td>
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<tr>
<td>CHICAGO AND NORTH WESTERN TRANSP CO.</td>
<td>0</td>
<td>1</td>
<td>0</td>
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<td>0</td>
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<tr>
<td>CHICAGO SOUTH SHORE &amp; SOUTH BEND RR</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>CONSOLIDATED RAIL CORP.</td>
<td>1</td>
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<td>DENVER AND RIO GRANDE WESTERN RR CO.</td>
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<tr>
<td>ILLINOIS CENTRAL GULF RR</td>
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<td>KANSAS CITY SOUTHERN RR CO.</td>
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<tr>
<td>METROPOLITAN DADE COUNTY TRANSIT</td>
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<td>1</td>
<td>0</td>
<td>0</td>
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<td>MISSOURI-KANSAS-TEXAS RR CO.</td>
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<tr>
<td>MISSOURI PACIFIC RR CO.</td>
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<td>SEABOARD COAST LINE RR(AL AND FORMOSA PLASTICS CO.)</td>
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(1) NOT INCLUDED IN TOTAL RAILROAD ACCIDENTS INVESTIGATED  
(2) AMTRAK PASSENGER TRAIN ACCIDENTS ARE INCLUDED UNDER REPORTING RAILROAD  
(3) ONE INVOLVED FIRE ONLY
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<th>EMPLOYEE FATALITY</th>
<th>PERSONAL FATALITY</th>
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<th>MAZ. RAT. (1) INVOLVED</th>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>9</strong></td>
<td><strong>21</strong></td>
<td><strong>0</strong></td>
<td><strong>1</strong></td>
<td><strong>5</strong></td>
<td><strong>37 (2)</strong></td>
<td><strong>6</strong></td>
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</tbody>
</table>

(1) NOT INCLUDED IN TOTAL RAILROAD ACCIDENTS INVESTIGATED

(2) ONE INVOLVED FIRE ONLY
<table>
<thead>
<tr>
<th></th>
<th>Collision</th>
<th>Derailment</th>
<th>Personal Casualty</th>
<th>Grade Crossing</th>
<th>Total</th>
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<td>Passengers</td>
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<td>8</td>
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<td>Injuries</td>
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<td>13</td>
<td>2</td>
<td>1</td>
<td>50</td>
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Note: "General Public" consists of all persons who are neither railroad employees nor passengers, including but not limited to persons on official business on the railroad, emergency forces, and members of the public not on railroad property.
<table>
<thead>
<tr>
<th></th>
<th>Collision</th>
<th>Derailment</th>
<th>Employee FATALITY</th>
<th>Personal FATALITY</th>
<th>Grade Crossing</th>
<th>Total</th>
<th>Max. Mat. (1) Involved</th>
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<td>Equipment Failures</td>
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<td><strong>Total</strong></td>
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<td>21</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>37</td>
<td>6</td>
</tr>
</tbody>
</table>

(1) NOT INCLUDED IN TOTAL RAILROAD ACCIDENTS/INCIDENTS INVESTIGATED

(2) "Other" Includes Human Failure, Damage from Natural Forces, Vandalism, Sabotage, System Design Inadequacies, Failure of Radio and Radio Components, and Failure of Cargo and Cargo Tiedown and/or Blocking

(3) One Involved Fire Only
REPORTED BY: Amtrak

LOCATION: Philadelphia, Pennsylvania

TRAIN:
1. Amtrak
2. 
3. 

CLASS: Passenger

DIRECTION: East

OPERATING PHASE: Stopping

BRIEF RAILROAD NO.: NYCR29030

DATE: 02/11/82

WEATHER: Clear

VISIBILITY: Day/1,000 ft

TIME: 1647 EDT

ACCIDENT DESCRIPTION: Amtrak train No. 612 had the 3 rear cars derail while entering the 30th Street Station. The train consisted of 6 electric self-propelled Metroliner passenger cars. There were no riders in the 3 derailed cars. The speed of the train was 23 mph. The derailment occurred at a rail joint where the gage was 59-3/8 inches and had a split crosstie under it.

PROBABLE CAUSE:
1. Track geometry - track gage not properly maintained

OTHER FACTORS:
1. Defective crossties

FATALITIES:
- Number: 
- Description: 
- Injuries: 
- Number: 
- Description: 

PROBABLE CAUSE OF CASUALTY:
1. 
2. 
3. 

PROPERTY LOSSES:
Railroad: $12,000
Non-Railroad: $0
Reported by: Atchison, Topeka & Santa Fe Railway Company
Brief of Railroad No.: DEN842019

Location: Coldthwaite, Texas
Time: 0555 CST
Date: 04/06/84
Weather: Clear
Visibility: Dawn/6000 Ft

Train:
1. Atchison, Topeka & Santa Fe Railway Co. Freight
2. Atchison, Topeka & Santa Fe Railway Co. Freight
3. 

Operating Phase: In route
Track No.: 1

Direction: East

Accident Description: Freight train Extra 3632 east collided with the head end of train Extra 2073 west while it was standing near the westbound signal. One crewmember was killed and 2 were injured. Six locomotive units of 3632 were derailed. Three locomotive units of 2073 were destroyed by collision and fire, and two cars derailed. The speed of 3632 at impact was 29 mph. Train 3632 had a track warrant issued by radio, instructing them to take the siding. Instead, they continued on the main track where 2073 was standing.

Probable Cause:
1. Failure to enter siding per instructions of track warrant.
2. Failure of personnel to recognize improper operating procedure as hazardous.
3. 

Other Factors:
1. 
2. 
3. 

Fatalities:
<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
<th>Injuries</th>
</tr>
</thead>
<tbody>
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<td>1</td>
<td>Employee on duty</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Employees on duty</td>
<td></td>
</tr>
</tbody>
</table>

Injuries:

Probable Cause of Casualty:
1. Thrown from seat/position in collision.
2. 
3. 

Probable Property Losses:
Railroad: 5861,000
Non-Railroad: 

Probable Cause of Casualty:
1. 
2. 
3. 

Probable Property Losses:
Railroad: 
Non-Railroad: 

Probable Cause of Casualty:
1. 
2. 
3. 

Probable Property Losses:
Railroad: 
Non-Railroad: 

Probable Cause of Casualty:
1. 
2. 
3. 

Probable Property Losses:
Railroad: 
Non-Railroad: 

Probable Cause of Casualty:
1. 
2. 
3. 

Probable Property Losses:
Railroad: 
Non-Railroad: 

Probable Cause of Casualty:
1. 
2. 
3.
NATIONAL TRANSPORTATION SAFETY BOARD
Washington, D.C. 20594

Reported by: Atchison, Topeka & Santa Fe Railway Company
Brief of Railroad No.: LAXB4Y2006

Location: Bellico, California
Time: 1305 PDF
Date: 06/14/84
Weather: Clear
Visibility: Day/7800 FT

Train: 1 Atchison, Topeka & Santa Fe Railway Co.
Class: Freight
Direction: East
Operating Phase: En route
Track No.: 1

Accident Description: Freight train No. 1-901-14, consisting of 4 locomotive units and 75 cars, derailed at a grade crossing while moving 51 mph. The 4 locomotive units and 1st 22 cars derailed. The engineer saw that the track was out of alignment and reached for the brake handle when the train derailed. Five minutes before the train arrived, a semi-tractor lowboy trailer had got stuck on the grade crossing and dislodged the track.

Probable Cause: 1. Lowboy truck-trailer dislodged track at grade crossing

Other Factors: 1.

Fatalities: Number: Description: Injuries: Number: Description:
- 0 -

Probable Cause of Casualty:
1. 
2. 

Property Losses:
Railroad: $2,081,000
Non-Railroad:
**Accident Description:**

Burlington Northern Railroad Company (BN) freight train 64TT085 (64785) (Extra 5086 West), while moving about 47 mph, struck the rear of standing BN freight train 43JJ005 (43J05) (Extra 5089 West) at Pacific Junction, Iowa. Four locomotive units and eight cars of train 64785 and the caboose and seven cars of train 43J05 were derailed. The accident occurred about 2 miles within the yard limits of Pacific Junction. There was no flag protection provided by the standing train, and none was required by BN operating rules. There was no fire, and no hazardous materials were involved.

**Probable Cause:**

<table>
<thead>
<tr>
<th>Probable Cause</th>
<th>Description</th>
<th>Number:</th>
<th>Number:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Failure</td>
<td>For Probable Cause see NTSB Publication NAR-83-09</td>
<td>1</td>
<td>6</td>
</tr>
</tbody>
</table>

**Other Factors:**

1. Fatigue
2. 
3. 

**Fatalities:**

<table>
<thead>
<tr>
<th>Fatality Description</th>
<th>Number:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineer 64TT085</td>
<td>1</td>
</tr>
</tbody>
</table>

**Injuries:**

<table>
<thead>
<tr>
<th>Injury Description</th>
<th>Number:</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 treated and released</td>
<td>5</td>
</tr>
<tr>
<td>1 hospitalized</td>
<td>1</td>
</tr>
</tbody>
</table>

**Property Losses:**

<table>
<thead>
<tr>
<th>Loss Type</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Railroad</td>
<td>$972,000</td>
</tr>
<tr>
<td>Non-Railroad</td>
<td></td>
</tr>
</tbody>
</table>
Fifty-eight cars of Burlington Northern Railroad Company freight train No. NTC-0718, moving about 52 mph, were derailed on the main track near Crystal City, Missouri. Two of the derailed cars came to rest in the Mississippi River. Within the train's 94 cars were 17 maintenance-of-way, ballast-laden hopper cars being transported to maintenance-of-way work locations north of St. Louis, Missouri. The train was being operated in revenue service without restriction.

**Probable Cause:**
1. **Cracked & Displaced Center Plate** — For Probable Cause See NTSB Publication NTSB/RA-84-01
2. 
3. 

**Other Factors:**
1. 
2. 
3. 

**Fatalities:**
- Number: 0
- Description:
- Injuries: Number: 0

**Probable Cause of Casualty:**
1. **N/A**
2. 
3. 

**Property Losses:**
- Railroad: $1,056,350
- Non-Railroad:
Accident Description: Westbound train No. 7 (Empire Builder) on route Seattle, WA, on BN trackage struck a southbound tractor semitrailer loaded with rock at the Roosevelt County Road Grade Crossing about 5.9 miles west of Bainville, Montana. The truck driver was killed instantly, 39 train passengers and 13 crewmembers were injured. The grade crossing had a standard railroad crossing warning sign. The whistle signal was sounded at the whistle post, located 1066.7 feet east of the crossing. The locomotive headlight and strobe light were illuminated. The truck driver had made 12 crossings on March 14th and 2 crossings prior to the accident on March 15th.

Probable Cause: 1. Failure of a vehicle to stop at unprotected grade crossing

Other Factors: 1. Inaudibility due to truck cab noise

Fatalities: | Number | Description |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- 1 -</td>
<td>Truck driver</td>
</tr>
</tbody>
</table>

Injuries: | Number | Description |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>Employees on duty</td>
</tr>
<tr>
<td>39</td>
<td>Passengers (includes minor injuries)</td>
</tr>
</tbody>
</table>

Probable Cause of Casualty:

1. Struck by train

Property Losses: | Railroad: $1,504,000 |
<p>|                | Non-Railroad: 25,000 |</p>
<table>
<thead>
<tr>
<th>Location:</th>
<th>Wiggins, CO</th>
<th>Brief of Railroad No.:</th>
<th>DCA-83-A-8002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time:</td>
<td>0338 MST</td>
<td>Date:</td>
<td>04-12-84</td>
</tr>
<tr>
<td>Weather:</td>
<td>Clear</td>
<td>Visibility:</td>
<td>Dark</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Train:</th>
<th>Class:</th>
<th>Direction:</th>
<th>Operating Phase:</th>
<th>Track No.:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Burlington Northern Inc.</td>
<td>Freight</td>
<td>West</td>
<td>En Route</td>
<td>Main</td>
</tr>
<tr>
<td>2 Burlington Northern Inc.</td>
<td>Freight</td>
<td>East</td>
<td>En Route</td>
<td>Main</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Accident Description:

Burlington Northern Railroad Company freight trains Extra 6714 West and Extra 7820 East collided head-on on the single main track about 1,027 feet west of the west turnout of the passing track at Wiggins, Colorado. Seven locomotive units derailed and were destroyed in the collision and burning diesel fuel was released from ruptured fuel tanks. 40 cars derailed, 26 of which were destroyed.

Probable Cause:

1. **Human Failure** - For Probable Cause See J8 Publication RAR-85-04

Other Factors:

1. Use of Alcohol
2. Fatigue
3. 

Fatalities:

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
<th>Injuries</th>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Employees</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Probable Cause of Casualty:

1. Crushed and/or ejected from locomotive
2. 
3. 

Property Losses:

<table>
<thead>
<tr>
<th>Railroads</th>
<th>Non-Railroads</th>
</tr>
</thead>
<tbody>
<tr>
<td>$23,891,428</td>
<td></td>
</tr>
</tbody>
</table>
NATIONAL TRANSPORTATION SAFETY BOARD  
Washington, D.C. 20594

Reported by: Burlington Northern Inc.  
Brief of Railroad No.: DCA-84-A-8009

Location: Newcastle, Wyoming  
Time: 0456 MST  
Date: 04/22/84  
Weather: Clear  
Visibility: Dark

Train:
1. Burlington Northern Inc.
2. Burlington Northern Inc.
3. Burlington Northern Inc.

Class:
Freight

Direction:
East

Operating Phase:
En Route

Track No.:
Main

Burlington Northern freight train Extra 7843 East struck the rear of Burlington Northern freight train Extra ATSF 8112 East on the main track at Pedro passing siding near Newcastle, Wyoming. During the collision and subsequent derailment sequence several cars of freight train Extra 5533 East, which were standing unattended in the Pedro passing track, were also struck and derailed. As a result, 5 locomotives units, a caboose, and 21 cars derailed. The locomotive units, caboose, and 13 cars were either destroyed or heavily damaged.

Probable Cause: 1. Procedural Failure – For Probable Cause See NTSB Publication NTSB RAR-85-04

Other Factors:
1. Use of alcohol by crewmembers

Fatalities:
Number: 2
Description: Employees

Injuries:
Number: 2
Description: Employees

Probable Cause of Casualty:
1. Collapse of structure (caboose)
2. Jumped from moving train
3. 

Property Losses:
Railroad: $1,358,993
Non-Railroad: 

Accident Description:
**Accident Description:**

Burlington Northern Railroad Company freight trains Extra 6760 West and Extra 7907 East collided head-on on the single track main line near Motley, Minnesota. The trains were being operated on dispatcher-issued train orders, in nonstandardized territory. The westbound train had been travelling about 35 to 40 mph and the eastbound train about 45 to 49 mph just before the emergency applications of the automatic air brakes of both trains. The dispatcher controlling the movement of the trains had been promoted to dispatcher recently before the accident and was working in his second tour of duty in that position. The dispatcher had been promoted from a stenographic/clerical position after having been nominated to and completing a company training program; he had no prior operating experience.

**Probable Cause:**
1. Procedure Failure - For Probable Cause See NTSB Publication NTSB/RAR-85-06

**Other Factors:**
1. 
2. 
3.

**Fatalities:**

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
<th>Injuries</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Employees</td>
<td></td>
</tr>
</tbody>
</table>

**Injuries:**

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Employees</td>
<td></td>
</tr>
</tbody>
</table>

**Probable Cause of Casualty:**

1. Collapse of structure (locomotive)
2. Thrown from seat (caboose)
3. 

**Property Losses:**
Railroad: $3,931,146
Non-Railroad: 

---
**NATIONAL TRANSPORTATION SAFETY BOARD**  
Washington, D.C. 20594

**Reported by:** Burlington Northern Inc.  
**Brief of Railroad No.:** CHI84PR006


| Train: 1 | Railroad: Burlington Northern Inc. | Class: Freight | Direction: West | Operating Phase: En route | Track No.: 1 |

Accident Description: Train No. 63 with 4 units, 38 loads, 1 empty, 1 caboose, 24.3 tons derailed 14 cars at mile post 40.3. The outer shell and housing of a roller bearing was found at mile post 38.48. The first marks on rail were at mile post 40.10. Speed at time of derailment was 50 mph; the engineer was not aware of impending accident. Overheated bearing was on car TTX 479473, the 11th car behind locomotive.

**Probable Cause:**
1. Overheated roller bearing
2. 

**Other Factors:**
1. 

**Fatalities:**
| Number: 0 | Description: |

**Injuries:**
| Number: 0 | Description: |

**Probable Cause of Casualty:**
1. 
2. 

**Property Losses:**
- Railroad: $288,000
- Non-Railroad: 
NATIONAL TRANSPORTATION SAFETY BOARD
Washington, D.C. 20594

Reported by: The Chesapeake and Ohio Railway Company
Brief of Railroad No.: ATL6FPRO30

Location: Campbellburg, Kentucky
Time: 0440 EDT
Date: 06/14/84
Weather: Cloudy
Visibility: Dark/800 FT

Train: 1 The Chesapeake and Ohio Railway Co.
Class: Freight
Direction: South
Operating Phase: En route
Track No.: 1

Accident Description: Sixty-one freight cars in southbound train GCQLO derailed in two locations in the train, the 11th through the 50th except the 17th car, and the 73rd through the 94th car out of a total consist of 104 cars, at mile post 38.4 and mp 39. The train speed was 61 mph in a 25 mph maximum authorized zone. Both the engineer and head brakeman stated that they had fallen asleep. When the engineer awoke he initiated an emergency application of the air brakes. There were no injuries or hazardous materials involved.

Probable Cause: 1. Excessive speed due to crew being asleep.

2. Excessive speed turned rail over in curve.

Other Factors: 1. 

Fatalities: Number: Description: Injuries: Number: Description:
0 - 

Probable Cause of Casualty: Property Losses:
1. Railroad: 52,439,000

2. bh-s-Railroad:
### Accident Description:
Twenty-two loaded ore cars in westbound unit train No. 146.8. The derailed cars struck and derailed 8 cars that were standing on adjacent tracks. According to the engineer the train speed had been reduced to 20 mph to comply with a train order speed of 20 mph. Speed reduction was accomplished by using the dynamic brake. After positioning the throttle in power No. 1, an undesired emergency brake application occurred. The outside rail turned on its side with car trucks dropping inside the gauge of the track.

### Probable Cause:
1. Rail displaced in curve under draft forces
2. Improperly secured rail in curve

### Other Factors:
1. 

### Fatalities:

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
</tr>
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</table>

### Injuries:

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

### Probable Cause of Casualty:

1. 
2. 

### Property Losses:

<table>
<thead>
<tr>
<th>Type</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Railroad</td>
<td>$473,000</td>
</tr>
<tr>
<td>Non-Railroad</td>
<td>$19,000</td>
</tr>
</tbody>
</table>
NATIONAL TRANSPORTATION SAFETY BOARD
Washington, D.C. 20594

Reported by: Chicago, South Shore & South Bend Railroad
Brief of Railroad No.: CHS&SBR

Location: New Carlisle, Indiana
Time: 1950 CST
Date: 5/18/84
Weather: Clear
Visibility: Dusk/5000 FT

Train: Chicago, So. Shore & So. Bend RR
Class: Passenger/Commuter
Direction: West
Operating Phase: En route
Track No.: 1

Accident Description: Westbound CHS&S RR commuter train No. 20 consisting of two self propelled electric cars derailed at a facing point switch at Olive siding which is approximately ten miles west of South Bend, Indiana. Speed was about 60 mph at time of derailment. There was a two man crew on the lead car and thirty-five passengers in the second car. Three passengers were treated and released at a local hospital. Engineer was not aware of impending accident.

Probable Cause: 1. Broken switch crank which allowed switch to go up.
2. 

Other Factors: 1. 

Fatalities: Number: Description: Injuries: Number: Description:
- 0 -
- 0 -

Probable Cause of Casualty:
1. 
2. 

Property Losses:
Railroad: $636,000
Non-Railroad: 

<table>
<thead>
<tr>
<th>Reported by:</th>
<th>Chicago, South Shore &amp; South Bend Railroad</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brief of Railroad No.:</td>
<td>CHS&amp;SBR</td>
</tr>
<tr>
<td>Location:</td>
<td>New Carlisle, Indiana</td>
</tr>
<tr>
<td>Time:</td>
<td>1950 CST</td>
</tr>
<tr>
<td>Date:</td>
<td>5/18/84</td>
</tr>
<tr>
<td>Weather:</td>
<td>Clear</td>
</tr>
<tr>
<td>Visibility:</td>
<td>Dusk/5000 FT</td>
</tr>
<tr>
<td>Train:</td>
<td>Chicago, So. Shore &amp; So. Bend RR</td>
</tr>
<tr>
<td>Class:</td>
<td>Passenger/Commuter</td>
</tr>
<tr>
<td>Direction:</td>
<td>West</td>
</tr>
<tr>
<td>Operating Phase:</td>
<td>En route</td>
</tr>
<tr>
<td>Track No.:</td>
<td>1</td>
</tr>
<tr>
<td>Accident Description:</td>
<td>Westbound CHS&amp;S RR commuter train No. 20 consisting of two self propelled electric cars derailed at a facing point switch at Olive siding which is approximately ten miles west of South Bend, Indiana. Speed was about 60 mph at time of derailment. There was a two man crew on the lead car and thirty-five passengers in the second car. Three passengers were treated and released at a local hospital. Engineer was not aware of impending accident.</td>
</tr>
<tr>
<td>Probable Cause:</td>
<td>1. Broken switch crank which allowed switch to go up.</td>
</tr>
<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>Other Factors:</td>
<td>1.</td>
</tr>
<tr>
<td>Fatalities:</td>
<td>Number: Description:</td>
</tr>
<tr>
<td></td>
<td>- 0 -</td>
</tr>
<tr>
<td></td>
<td>- 0 -</td>
</tr>
<tr>
<td>Probable Cause of Casualty:</td>
<td>1.</td>
</tr>
<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>Property Losses:</td>
<td>Railroad: $636,000</td>
</tr>
<tr>
<td>Non-Railroad:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reported by: Chicago, South Shore &amp; South Bend Railroad</th>
<th>Brief of Railroad No.: CHS&amp;SBR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location: New Carlisle, Indiana</td>
<td>Time: 1950 CST</td>
</tr>
<tr>
<td>Date: 5/18/84</td>
<td>Weather: Clear</td>
</tr>
<tr>
<td>Visibility: Dusk/5000 FT</td>
<td>Train: Chicago, So. Shore &amp; So. Bend RR</td>
</tr>
<tr>
<td>Class: Passenger/Commuter</td>
<td>Direction: West</td>
</tr>
<tr>
<td>Operating Phase: En route</td>
<td>Track No.: 1</td>
</tr>
<tr>
<td>Accident Description: Westbound CHS&amp;S RR commuter train No. 20 consisting of two self propelled electric cars derailed at a facing point switch at Olive siding which is approximately ten miles west of South Bend, Indiana. Speed was about 60 mph at time of derailment. There was a two man crew on the lead car and thirty-five passengers in the second car. Three passengers were treated and released at a local hospital. Engineer was not aware of impending accident.</td>
<td></td>
</tr>
<tr>
<td>Probable Cause: 1. Broken switch crank which allowed switch to go up.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>Other Factors: 1.</td>
<td></td>
</tr>
<tr>
<td>Fatalities: Number: Description:</td>
<td></td>
</tr>
<tr>
<td>- 0 -</td>
<td></td>
</tr>
<tr>
<td>- 0 -</td>
<td></td>
</tr>
<tr>
<td>Probable Cause of Casualty:</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>Property Losses: Railroad: $636,000</td>
<td></td>
</tr>
<tr>
<td>Non-Railroad:</td>
<td></td>
</tr>
</tbody>
</table>
**Accident Description:**

Consolidated Rail Corporation (Conrail) Train ENP1-6X struck the rear of standing Conrail Train 01PI-6 at Control Point (CP) Salts near Saltsburg, Pennsylvania, while moving westward on track No. 2 about 27 mph. Derailing cars from train 01PI-6 were struck by eastbound Conrail train TV-12M while it was moving about 38 mph on No. 1 track. The derailment of a car in train TV-12M caused its brakes to apply in emergency. Two cars and a caboose derailed in train 01PI-6, 1 locomotive unit derailed in train ENP1-6X, and 1 car derailed in train TV-12M. In addition, a fire ensued and 19 "piggy-back" truck semitrailers carried by train TV-12M were severely damaged and some destroyed.

**Probable Causes:**

1. Human Failure - For Probable Cause See NTSB Publication BAR-85-02

**Other Factors:**

1. 

2. 

3. 

**Fatalities:**

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

**Injuries:**

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Employees on duty</td>
</tr>
</tbody>
</table>

**Probable Cause of Casualty:**

1. Thrown from seat/position in collision

2. 

3. 

**Property Losses:**

<table>
<thead>
<tr>
<th>Railroad</th>
<th>Non-Railroad</th>
</tr>
</thead>
<tbody>
<tr>
<td>$784,719</td>
<td></td>
</tr>
</tbody>
</table>
Accident Description:

Train 1 broke in two during switching. As locomotive moved cut of cars forward, empty boxcar coupler overrode the coupler of a loaded tank car, puncturing it and releasing about 14,500 gallons of nitric acid. Ninety thousand (90,000) nearby residents were evacuated from a 4 square mile area.

Probable Cause:

1. Component failure - For Probable Cause See NTSB Publication RAR-85-10

Other Factors:

1. 
2. 
3. 

Probable Cause of Casualty:

1. Inhalation of nitric acid fumes

Property Losses:

Railroad: $341,000.00

Non-Railroad:
Accident Description: Illinois Central Gulf Railroad (ICG) freight train Extra 9629 East (GS-2-27) derailed 43 cars on the single main track of the Hammond District in Livingston, Louisiana. Of the derailed cars, 36 were tank cars; 27 of these cars contained various regulated hazardous or toxic chemical commodities, 2 contained nonregulated hazardous materials, and 5 contained flammable petroleum products. A total of 20 tank cars were punctured or breached in the derailment. Fire broke out in the wreckage, and smoke and toxic gases were released into the atmosphere. Thermally-induced explosions of two tank cars that had not been punctured caused them to rocket violently. About 3,000 persons living within a 5-mile radius of the derailment site were evacuated for as long as 2 weeks. Nineteen residences and other buildings in Livingston were destroyed or severely damaged. More than 200,000 gallons of toxic chemical product were spilled and absorbed into the ground requiring extensive excavation of contaminated soil and its transportation to a distant dump site. This has resulted in long-term closure of the railroad line and an adjacent highway.
**NATIONAL TRANSPORTATION SAFETY BOARD**
Washington, D.C., 20594

<table>
<thead>
<tr>
<th>Reported by:</th>
<th>Illinois Central Gulf RR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location:</td>
<td>Fort Knox, KY</td>
</tr>
<tr>
<td>Date:</td>
<td>03-22-83</td>
</tr>
<tr>
<td>Weather:</td>
<td>Snow</td>
</tr>
<tr>
<td>Visibility:</td>
<td>Dark/10 miles</td>
</tr>
<tr>
<td>Time:</td>
<td>0442 EST</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Train</th>
<th>Class</th>
<th>Direction</th>
<th>Operating Phase</th>
<th>Track No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Freight</td>
<td>North</td>
<td>En Route</td>
<td>Main</td>
</tr>
</tbody>
</table>

**Accident Description:**
Illinois Central Gulf Railroad Company train SML-4-21, 1st No. 64, engine 702, derailed 13 cars (3 tank cars and 10 boxcars) in a 2° left curve at Fort Knox, Kentucky, while moving about 20 mph over an excessively worn, badly shelled rail which tipped and broke. During the derailment, two tank cars containing chloroprene overturned, and chloroprene began leaking from a dome valve of one of the cars. At 9:00 a.m., three E.I. duPont hazardous material experts from Louisville, Kentucky, arrived at the derailment site. About 9:45 a.m., the leak was stopped. Evacuation of the area was not necessary.

**Probable Cause:**
1. Component Failure - See Probable Cause for NTSB Publication RAR-83-07

**Other Factors:**
1. 
2. 
3. 

**Fatalities:**
<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

**Injuries:**
<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

**Probable Cause of Casualty:**
1. 
2. 
3. 

**Property Losses:**
- Railroad: $199,831
- Non-Railroad: 

Amtrak train No. 361, operating on the Illinois Central Gulf Railroad, collided with a Marquette Motor Service Terminals, Inc., delivery truck at the New River Road railroad/highway grade crossing about 1 mile north of Wilmington, Illinois. The locomotive unit and all three cars of the train were derailed, and the truck and its loading were destroyed.

Probable Cause: 1. Human Failure - For Probable Cause see NTSB/HR-84/02
2. 
3.

Other Factors: 1. 
2. 
3.

Fatalities:

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
<th>Injuries</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td>2</td>
<td>Truck Driver - Hospitalized</td>
</tr>
<tr>
<td></td>
<td></td>
<td>18</td>
<td>Train crewmembers - Hospitalized</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Train passengers - Hospitalized</td>
</tr>
</tbody>
</table>

Probable Cause of Casualty:
1. Thrown from seat/positions
2. Injurious environment
3. Falling Luggage

Property Losses:
- Railroad: $560,000
- Non-Railroad: $24,000
**Reported by:** Illinois Central Gulf Railroad  
**Brief of Railroad No.:** CH18AP002

**Location:**  
Olympia Fields, Illinois

**Time:** 1715 CST  
**Date:** 4/26/84  
**Weather:** Clear  
**Visibility:** Day/3000 FT

**Train:**  
1. Illinois Central Gulf RR  
   - **Class:** Unit Freight  
   - **Direction:** North  
   - **En route:** Yes  
   - **Track No.:** 4

**Accident Description:** Northbound loaded unit coal train NKP 325 with 4 locomotive units, 101 cars, 13,370 tons, derailed 14 cars at mile post 25.8. Speed of train was 40 mph and train brakes were applied with 7 pounds of air at time of accident. Track had been surfaced in November 1983 and rail anchors were disturbed and ineffective in anchoring rail. Temperature was 84°F at time of derailment.

**Probable Cause:**  
1. Track buckled due to missing rail anchors and heat.

**Other Factors:**  
1. 

**Fatalities:**  
- 0 -  

**Injuries:**  
- 0 -  

**Probable Cause of Casualty:**  
1. 
2.

**Property Losses:**  
- Railroad: $292,000  
- Non-Railroad:
Accident Description: Freight train No. 2, consisting of 6 locomotive units and 101 cars, derailed 13 cars while moving 27 mph. Four derailed cars contained hazardous materials and about 500 people were evacuated. An empty tank car (GATX 26241) was punctured, releasing butadiene vapors. The initial derailment was in a 3 degree curve with irregular cross level measurements, wide gage, and worn rail.

Probable Cause 1. Failure of cross elevation due to normal wear and deterioration.

Other Factors:
1. 
2. 
3. 

Fatality:
- Number: 0
- Description: 

Injuries:
- Number: 0
- Description: 

Probable Cause of Casualty:
1. 
2. 
3. 

Property Losses:
Railroad: $501,000
Non-Railroad:
REPORTED BY: Metropolitan Dade County Transit Agency

Brief of Railroad No.: ATL8462008

Location: Miami, Florida

Time: 1837 EST

Date: 4/29/84

Weather: Clear

Visibility: Day/9000 ft

Train: Metro Dade County Transit Agency

Class: Passenger transit

Direction: North

Operating Phase: Testing

Track No.: 1

Accident Description: Two coupled rapid transit cars being operated by a rail supervisor collided with a standing pair of cars which were then driven into a third pair of cars standing. A short distance ahead of the impacted cars. The initial point of impact was 600 ft. south of Vizcaya Station. A rail operator was seated at the control stand on the south end of the two coupled cars that struck the standing cars. Speed at impact was estimated to be 25 mph. Each occupant was treated and released at local hospital. Operator was aware of impending accident.

Probable Cause: 1. Failure of operator to control speed of train approaching cars ahead.

Other Factors: 1.

Fatalities: Number: Description: Injuries: Number: Description:

- 0 -

- 0 -

Property Losses:

Railroad: $2,700,000

Non-Railroad:
After receiving a clear signal indicating a clear main track route, Missouri-Kansas-Texas Railroad train No. 103, entered a misaligned track switch leading from the main track to an interchange track and collided with standing freight cars on the interchange track. A signal maintainer was working on the switch circuit controller, and had disconnected the shunt wires while working at that location.

Probable Cause: 1. Procedural Failure - For Probable Cause See NTSB Publication NTSB-RAR-83-08

Other Factors:
1. 
2. 
3. 

Fatalities: Number: Description: Injuries: Number: Description: 
0

1. Employee hospitalized
2. Employees treated and released

Probable Cause of Casualty:
1. Jumped from train
2. Thrown from position in train
3. 

Property Losses: Railroads: $2,484,295
Non-Railroads: 

**National Transportation Safety Board**

**Location:** Woodlawn, Texas

**Train:**
1. AMTRAK
2. 
3. 

**Accident Description:** Amtrak train No. 21 (The Eagle), with 162 persons aboard, derailed near Woodlawn, Texas, while travelling at 72 mph on the Missouri Pacific Railroad. The train was travelling westbound on the single main track when it passed over a section of rail that a repair crew had just installed to replace a broken rail. The break had occurred at a field weld in a length of new continuous-welded, 136-lb RE section, chrome-vanadium alloy, high-strength, vacuum-treated rail, which had been installed in the track about 1 month earlier. The temporary repair consisted of removing a length of the outer rail in a curve and replacing it with a 19-foot 6-inch length of rail bolted in place. The repair insert was a section of used, 136-lb RE section, standard-carbon rail. The repair crew used an oxyacetylene torch to cut both the new alloy rail and the used standard-carbon rail during the repair.

**Probable Cause:**
1. Procedural Failure  - For Probable Cause Sec NTSB Publication HAB-85-01
2. 
3. 

**Other Factors:**
1. Component Failure
2. 
3. 

**Fatalities:**

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
<th>Injuries</th>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Passengers</td>
<td></td>
<td>2</td>
<td>Employees hospitalized</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>23</td>
<td>Passengers hospitalized</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>47</td>
<td>Passengers treated &amp; released</td>
</tr>
</tbody>
</table>

**Probable Cause of Casualty:**
1. Thrown from seat position
2. Burned by track ballast
3. 

**Property Losses:**
- Railroad: $2,180,000
- Non-Railroad: 

---
NATIONAL TRANSPORTATION SAFETY BOARD
Washington, D.C. 20594

Reported by: New York City Transit Authority

Brief of Railroad No.: DCA-84-A-0007

Location: New York City, New York
Time: 1727 EST
Date: 3/17/84
Weather: Tunnel
Visibility: Tunnel

Train:
1. New York City Transit Authority
2. 
3. 

Class:
Passenger Transit

Direction: South
Operating Phase: En Route
Track No.: 2

Accident Description:
A New York City Transit Authority 10-car IRT, subway train derailed in the Joralemon Street Tunnel under the East River about 1,900 feet south of Bowling Green Station in New York, New York. The train which was loaded to virtual capacity with about 1,500 passengers, was exceeding the 10-mph speed restriction authorized by a general order for a track section under repair. The derailment did not result in serious injuries to passengers or serious damage to the equipment. The passengers detainted and walked about 700 feet to an emergency exit from the tunnel to the street. A second train stalled in the tunnel just south of the Bowling Green Station when the derailment interrupted traction power to the train. Passengers were evacuated through another train onto the station platform.

Probable Cause:
1. Human failure—For Probable Cause See NTSB Publication RAR-85-07
2. 
3. 

Other Factors:
1. 
2. 
3. 

Fatalities:
<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
<th>Injuries</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

Probable Cause of Casualty:
1. 
2. 
3. 

Property Losses:
Railroad: 0
Non-Railroad: 0
Northbound Seaboard Coast Line freight train No. 120 derailed at the Swift Creek Bridge in Colonial Heights, Virginia, following a hard slack run in which occurred the train crossing a change in grades. The train was classified as restricted by SCL Timetable Designation with a maximum authorized speed of 50 mph. The engineer stated the train speed was 40 mph at the time of derailment; however, tests conducted following the accident indicate that the train speed was 60 mph when the train derailed. Cars No. 99 through No. 118 derailed. A tank car was breached in the derailment, and its contents were released and immediately ignited. Erroneous and conflicting information concerning hazardous material on the train caused confusion and resulted in misdirection emergency response efforts.

Probable Cause: 1. Human Error - For Probable Cause See NTSB Publication SAR-83-04

Other Factors:
1. 
2. 
3. 

Fatalities: Number: Description: Injuries: Number: Description:
0 
12 Firefighters - Treated and released
1 
State official - Treated and released

Property Losses:
Railroad: $1,228,444
Non-Railroad: 
Accident Description:

Vinyl chloride monomer (VCM) under pressure escaped from a railroad tank car at the loading facility within the Formosa Plastics Corporation Chemical Manufacturing Plant in Baton Rouge, Louisiana. The release VCM was ignited by one or more sources, and a large billowing fire ensued. An adjacent tank containing VCM was involved in the fire but did not rupture. Two tank cars were destroyed, three tank cars were damaged moderately, and the loading facility was damaged extensively.

<table>
<thead>
<tr>
<th>Probable Cause</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Human Failure - For Probable Cause See NTSB Publication RAR-85-08</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other Factors</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Procedural Failure</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fatalities:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number: 2</td>
<td>Plant Employees</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Probable Cause of Casualty:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Property Losses:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Railroad: $1,000,000</td>
<td></td>
</tr>
<tr>
<td>Non-Railroad:</td>
<td></td>
</tr>
</tbody>
</table>
Reported by: Seaboard System Railroad Inc.

Brief of Railroad No.: ATL-83-A-R042

Location: Rowland, North Carolina

Time: 01:10 EDT

Date: 8/25/83

Weather: Clear

Visibility: Dark but lighted

Train:
1. AMTRAK
2.
3.

Class: Passenger

Direction: North

Operating Phase: En Route

Track No.: 1

Accident Description:
Northbound National Railroad Passenger Corporation (AMTRAK) train No. 88, the SOUTHEASTERN, struck an S.L. Belk Trucking Company, Inc., tractor-trailer combination truck that had become lodged on a grade crossing of the single main track of the Seaboard System Railroad at Rowland, North Carolina. The 2 locomotive units and 2 cars of the 18-car consist of the train were derailed. The truck was damaged substantially and its cargo destroyed. Two of the 363 passengers on the train were treated at the scene and 15 were taken to local hospitals; 1 passenger was admitted, and the others were treated and released. Six train attendants also were treated and released. The truck driver was not injured. There was no fire.

Probable Cause:
1. Human Failure - For Probable Cause See NTSB Publication BHR-84/01
2.
3.

Other Factors:
1.
2.
3.

Fatalities: 
Number: 0 
Description: 
Injuries: 
Number: 1 
Description: Passenger - hospitalized

Number: 14 
Description: Passenger - minor

Number: 6 
Description: Crewmembers - minor

Probable Cause of Casualty:
1. Thrown from seat/position in derailment
2.
3.
Seaboard System Railroad train Extra 1751 North moved onto the main track from the north end of the siding at Sullivan, Indiana, and proceeded northward. About 5:37 a.m., after Extra 1751 North had attained a speed of approximately 18 mph and had traveled 1,939 feet beyond the siding switch, Seaboard train Extra 8051 North, moving about 35 mph, overtook and struck the rear caboose of Extra 1751 North. The impact derailed 2 cars and 2 cabooses of Extra 1751 North and 3 locomotive units and 25 cars of Extra 8051 North.

**Probable Cause:**
1. Human Failure
   For Probable Cause See NTSB Publication RAR-84-02
2. 
3. 

**Other Factors:**
1. Alcohol use
2. 
3. 

**Fatalities:**

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
<th>Injuries</th>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Employees</td>
<td></td>
<td>3</td>
<td>Employees treated and released</td>
</tr>
</tbody>
</table>

**Probable Cause of Casualty:**
1. Crushed in caboose
2. 
3. 

**Property Losses:**
Railroad: $927,580
Non-Railroad: 

---

**Reported by:** Seaboard System Railroad Inc.  
**Brief of Railroad No.:** DCA-83-A-RO09  
**Location:** Sullivan, IN  
**Time:** 0532 CDT  
**Date:** 9-14-83  
**Weather:** Clear  
**Visibility:** Down  
**Train:**  
1. Seaboard System RR Inc.  
2. Seaboard System RR Inc.  
3. 

---
Location: Kittrell, North Carolina

Time: 1845 EDT

Date: 03/05/84

Weather: Cloudy - light rain

Visibility: Day/4 miles

Train: 1

AMTRAK

Class: Passenger

Direction: South

Operating Phase: En Route

Track No.: 1

Accident Description:

Southbound AMTRAK train No. 81, the Silver Star, consisting of 3 locomotive units and 18 cars, derailed 1 locomotive unit and 18 cars while traveling at 79 mph on Seaboard System Railroad track near Kittrell, North Carolina.

Probable Cause: 1. Component Failure - For Probable Cause See NTSB Publication RAR-85-03

Probable Cause of Casualty:

1. Thrown from seat/position in derailment

Fatalities:

Injuries: 11

Property Losses:

Railroad: $2,536,000

Non-Railroad: ____________

Description:

Crew members

Passengers

Crew members

Passengers

Crew members

Passengers

Crew members
NATIONAL TRANSPORTATION SAFETY BOARD
Washington, D.C. 20594

Reported by: Seaboard System RR Inc.
Brief of Railroad No.: ATL84PR009

Location: Montrose, Georgia
Time: 0300 EDT
Date: 05/29/84
Weather: Cloudy
Visibility: Dark/300 FT

Train: 1 Seaboard System RR Inc.
Class: Freight
Direction: East
Operating Phase: En route
Track No.: 1

Accident Description: Freight train Extra 4628 East, consisting of four locomotive units and 60 cars, derailed 29 cars while moving 49 mph. The train ran through an area of washed-out track as the brakes went into an emergency application. The locomotives and 2 cars made it through the wash-out, but the following 29 cars derailed. About seven inches of rain had fallen the previous evening.

Probable Cause:
1. Track washed out due to excessive rainfall.
2. Weather alert system had been turned off.

Other Factors:

Fatalities: Number: Description:

Injuries: Number: Description:

Probable Cause of Casualty:
1.
2.

Property Losses:
Railroad: $906,000
Non-Railroad: 
Commuter Train No. 817 was starting to move out of the Fox Chase Station when a late-arriving passenger ran from the parking lot, crossed the platform and attempted to board the second car of the three-car train. The person was not completely inside the car and he struck a raised landscaped person's boarding platform that is at the end of the low-level platform. He was dragged from the train and fatally injured. The train speed was about 25 mph. After hearing the person strike the raised platform, the conductor signaled the engineer to stop the train.

<table>
<thead>
<tr>
<th>Probable Cause of Casualty:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Struck by object while entering train</td>
<td></td>
</tr>
</tbody>
</table>
**NATIONAL TRANSPORTATION SAFETY BOARD**
Washington, D.C. 20594

<table>
<thead>
<tr>
<th>Location: El Monte, California</th>
<th>Brief of Railroad No.: TAX8APR003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time:</td>
<td>Date:</td>
</tr>
<tr>
<td>0649 PDT</td>
<td>05/04/84</td>
</tr>
<tr>
<td>Weather:</td>
<td>Visibility:</td>
</tr>
<tr>
<td>Clear</td>
<td>Day/3000 FT</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Train: Amtrak</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class:</td>
<td>Passenger</td>
</tr>
<tr>
<td>Direction:</td>
<td>West</td>
</tr>
<tr>
<td>Operating Phase:</td>
<td>En route</td>
</tr>
<tr>
<td>Track No.:</td>
<td>1</td>
</tr>
</tbody>
</table>

**Accident Description:** Westbound train No. 1 struck a vehicle at the Peck Road Intersection with the railroad and fatally injured four members of the same family. The accident occurred on the Alhambra Line main track at mile post 455.30. The train speed was 50 mph. The whistle was being sounded and the headlight was illuminated at the time of the collision. The crossing is protected by flashing red lights, bells and gates. Post accident tests indicate that the protection was functioning properly.

**Probable Cause:**
1. Failure of vehicle operator to stop at protected rail-highway grade crossing due to error in judgment.
2. 

**Other Factors:**
1. 

**Fatalities:**

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
<th>Injuries</th>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Public on RR property</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Probable Cause of Casualty:**

1. Struck by train
2. 

**Property Losses:**

<table>
<thead>
<tr>
<th>Railroad</th>
<th>Non-Railroad</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1,000</td>
<td>$4,000</td>
</tr>
</tbody>
</table>
### Accident Description:
Six locomotives and 10 freight cars in westbound train No. 01947805-10 derailed at a speed of 25 mph. The point of derailment was the junction switch that connects the Alhambra Line and the State Street Line. An inspection of the switch disclosed that a rail anchor wedged between the right hand point and the running rail approximately one-half inch below the top of rail. The rail anchor exhibited flange marks where the wheel of the lead locomotive forced it down between the switch point and running rail resulting in the gapping of the switch points. The general derailment followed.

### Probable Cause:

1. Vandalism, malicious mischief
2. 

### Other Factors:
1. 

### Fatalities:

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

### Injuries:

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Employees on duty</td>
</tr>
</tbody>
</table>

### Probable Cause of Casualty:

1. None
2. 

### Property Losses:

| Railroad: | $1,552,000 |
| Non-Railroad: | $47,000 |
Accident Description:

AMTRAK passenger train No. 820 (The Crescent), en route from New Orleans, Louisiana to Washington, D.C., with 331 passengers and 18 crew members aboard, derailed when it struck a landslide near Rockfish, Virginia, about 23 miles south of Charlottesville, Virginia. Heavy rains in the area preceded the landslide. The track had been inspected 6 hours before the accident. The train was moving about 48 mph at the time of the accident. There was no train order in effect for reduced speed in the area of the derailment.

Probable Cause:
1. Procedural Failure - For Probable Cause See NTSB Publication RAR-83-10
2. 
3. 

Other Factors:
1. 
2. 
3. 

Fatalities:

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
<th>Injuries</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

Injuries:

<table>
<thead>
<tr>
<th>Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Passengers</td>
</tr>
<tr>
<td></td>
<td>Crew members</td>
</tr>
</tbody>
</table>

Property Losses:

<table>
<thead>
<tr>
<th>Railroad</th>
<th>Non-Railroad</th>
</tr>
</thead>
<tbody>
<tr>
<td>$232,000</td>
<td></td>
</tr>
</tbody>
</table>
NATIONAL TRANSPORTATION SAFETY BOARD
Washington, D.C. 20594

Reported by: Union Pacific Railroad
Brief of Railroad No.: LAXSAFE002

Location:
Time: 0320 PST
Date: 04/07/84
Weather: Clear
Visibility: Dark/500 FT

Del Paso, California

Train: 1 Union Pacific Railroad
Railroad:
Class: Freight
Direction: West
Operating Phase: En route
Track No.: 1

Accident Description: Seventeen loaded freight cars in westbound train No. B67-6 derailed at mile post 142.9 at 50 mph. Initial marks of the derailment were wheel and track side marks on the crossings at mile post 142.9. A failed journal was on the R-1 axle on the R-end of car BN244599. The derailed wheels and track side struck a switch and destroyed the track structure. There were no injuries, or hazardous materials involved.

Probable Cause:
1. Failure of axle journal due to overheating.

Other Factors:
1.

Fatalities: - 0 -
Description:
Injuries: - 0 -
Description:

Probable Cause of Casualty:
1. 

Property Losses:
Railroad: $680,000
Non-Railroad:
NATIONAL TRANSPORTATION SAFETY BOARD
Washington, D.C. 20594

Reported by: Union Pacific Railroad
Brief of Railroad No.: LAX7APR94

<table>
<thead>
<tr>
<th>Location:</th>
<th>Time:</th>
<th>Date:</th>
<th>Weather:</th>
<th>Visibility:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dayton, Nevada</td>
<td>12:01 P.M.</td>
<td>05/28/84</td>
<td>Clear</td>
<td>Day/2400 FT</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Train:</th>
<th>Railroad:</th>
<th>Class:</th>
<th>Direction:</th>
<th>Operating Phase:</th>
<th>Track No.:</th>
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<tbody>
<tr>
<td>1</td>
<td>Southern Pacific Transportation Co.</td>
<td>Freight</td>
<td>East</td>
<td>En route</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
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</tbody>
</table>

Accident Description: Two locomotives and 30 freight cars in train 11X06CF27 derailed while crossing a stationary railroad bridge at mile post 610.96 at a speed of 45 mph. As the lead locomotive started onto the bridge the headend crew detected a slight lateral movement and seconds later an unwanted emergency air brake application occurred. On May 27, 1984, a local rancher (member of the Nevada State Legislature) notified the U.P. that there was water running around the backside of the bridge and that the bridge might wash away. Seven trains passed successfully over the bridge before the accident. There were no injuries or hazardous materials involved.

Probable Cause:
1. Bridge washout from rain and/or erosion.
2. Lack of adequate instructions for performing maintenance of way procedures.

Other Factors: 1.

<table>
<thead>
<tr>
<th>Fatalities:</th>
<th>Number:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
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<table>
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<tr>
<th>Injuries:</th>
<th>Number:</th>
<th>Description:</th>
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<tbody>
<tr>
<td></td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

Probable Cause of Casualty:
1.  
2.  

Property Losses:
Railroad: $2,726,000
Non-Railroad:  


WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY (WMATA) Blue/Orange Line train No. 410 derailed at the Smithsonian Interlocking on the "downtown" subway line. While being operated manually, train No. 410 had been unintentionally routed into a crossover track at the interlocking. Without requiring a supervisor, who was at the location, or the train operator to ascertain that it was safe to do so, the WMATA Operations Control Center (OCC) allowed the supervisor to back the train out of the crossover track. As this was being done, the rear car derailed and struck the end of a reinforced concrete barrier wall separating the two main tracks in the subway tube. The aluminum sidewall of the car was severed and the main passenger compartment was breached.

Probable Cause: 1. Human Failure - For probable cause See NTSB-RAR-82-6
2. Procedural Failure

Other Factors: 1.
2.
3.

Fatalities: Number: 3     Description: Passengers
Injuries: Number: 25     Description: Passenger Hospitalized

Probable Cause of Casualty: 1. Crushed Between Seats
2. Injurious Environment
3.