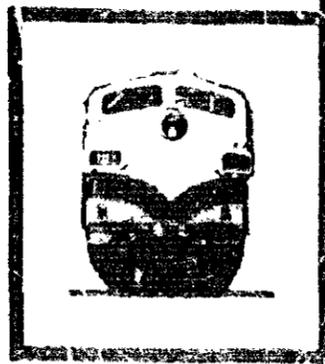


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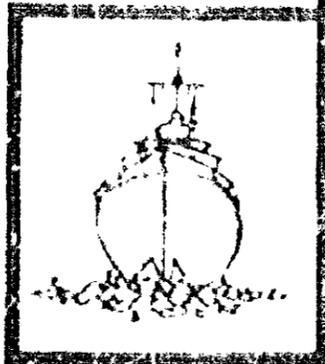


NATIONAL TRANSPORTATION SAFETY BOARD



WASHINGTON, D.C. 20594

RAILROAD ACCIDENT REPORTS



BRIEF FORMAT
ISSUE NUMBER 3 - - 1984



NTSB/RAB-85/07



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15. Supplementary Notes					
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: 84-112, 113, 114 84-117 through 124 84-126 through 130 84-133 through 137 84-139, 140, 141 84-143 84-145, 146					
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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 27 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.

Requests for reproduction should be forwarded to:

National Transportation Safety Board
Public Inquiries Section
Washington, D.C. 20594

**National Transportation Safety Board
Railroad Field Offices**

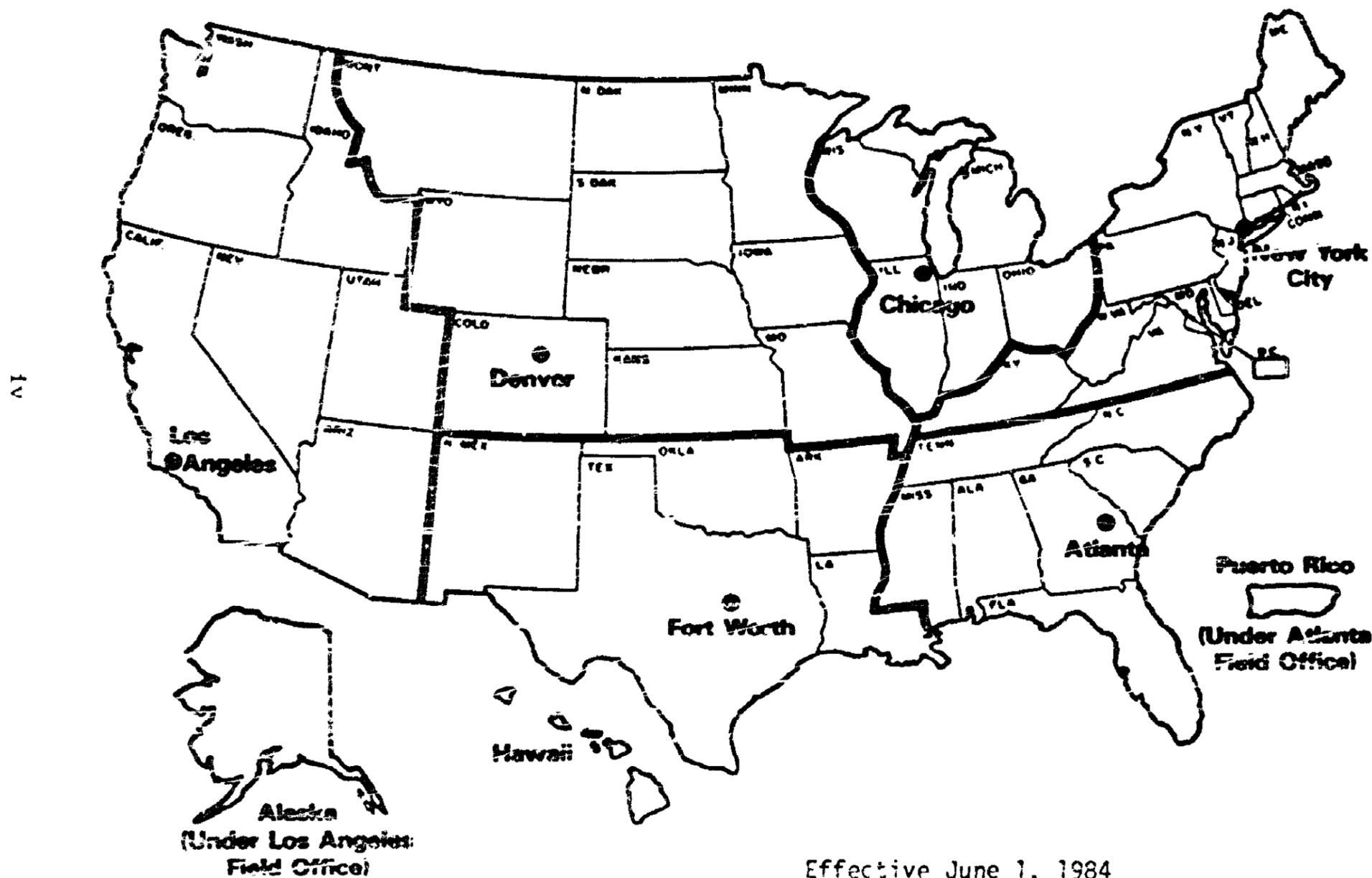


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EXPLANATORY NOTES

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, 1976, 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)

REPORTING RAILROAD	COLLISION	DERAILMENT	EMPLOYEE FATALITY	PERSONAL FATALITY	GRADE CROSSING	TOTAL	HAZ. MAT. (1) INVOLVED
AMTRAK	1	0	0	0	0	1	0
BURLINGTON NORTHERN INC.	1	2	0	0	0	3	0
CHICAGO & NORTHWESTERN TRANSP. CO.	0	1	0	0	0	1	0
CONSOLIDATED PAUL CORP.	1	0	0	0	0	1	1
FORT WORTH AND DENVER RY CO.	0	1	0	0	0	1	0
ILLINOIS CENTRAL GULF RR	0	1	0	0	0	1	0
MISSOURI PACIFIC RR CO.	1	2	0	0	0	3	1
NORFOLK SOUTHERN RY CO.	0	1	1	0	0	2	0
SAN FRANCISCO MUNICIPAL RY.	0	0	0	0	1	1	0
SEABOARD SYSTEM RR INC.	0	2	0	0	2	4	3
SOUTHEASTERN PENNSYLVANIA TRANSP. AUTH.	0	0	0	1	0	1	0
SOUTHERN PACIFIC TRANSP. CO.	0	4	2	0	1	7	0
UNION PACIFIC RR	0	1	0	0	0	1	0
TOTAL	4	15	3	1	4	27	5

(1) NOT INCLUDED IN TOTAL RAILROAD ACCIDENTS/INCIDENTS INVESTIGATED
 (2) AMTRAK PASSENGER TRAIN ACCIDENTS ARE INCLUDED UNDER REPORTING RAILROAD

TABLE 2:
ACCIDENTS BY STATE AND TYPE
(FIGURES BELOW REPRESENT A 3 MONTH PERIOD)

STATE	COLLISION	DERAILMENT	EMPLOYEE FATALITY	PERSONAL FATALITY	GRADE CROSSING	TOTAL	HAZ. MAT. (1) INVOLVED
ARIZONA	0	1	0	0	0	1	0
CALIFORNIA	0	2	2	0	2	6	0
GEORGIA	0	3	0	0	0	3	2
ILLINOIS	0	0	1	0	0	1	0
IOWA	0	1	0	0	0	1	0
KANSAS	0	1	0	0	0	1	0
LOUISIANA	0	1	0	0	0	1	0
MISSISSIPPI	0	1	0	0	0	1	0
NEBRASKA	1	1	0	0	0	2	0
NEW JERSEY	1	0	0	1	0	2	1
NEW YORK	1	0	0	0	0	1	0
SOUTH CAROLINA	0	0	0	0	2	2	1
TEXAS	1	1	0	0	0	2	1
UTAH	0	1	0	0	0	1	0
WASHINGTON	0	1	0	0	0	1	0
WYOMING	0	1	0	0	0	1	0
TOTAL	4	15	3	1	4	27	5

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

TABLE: 3
CASUALTIES BY CLASS OF PERSON AND ACCIDENT TYPE
(FIGURES BELOW REPRESENT A 3 MONTH PERIOD)

	COLLISION	DEPARTMENT	PERSONAL CASUALTY	GRADE CROSSING	TOTAL
RAILROAD EMPLOYEES					
FATALITIES.....	0	1	3	1	5
INJURIES.....	11	4	1	5	19
PASSENGERS					
FATALITIES.....	1	0	1	0	2
INJURIES.....	129	0	0	32	161
GENERAL PUBLIC					
FATALITIES.....	0	0	0	4	4
INJURIES.....	0	0	0	0	0

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 4:
CAUSAL FACTORS BY MAJOR CATEGORY AND ACCIDENT TYPE
(FIGURES BELOW REPRESENT A 3 MONTH PERIOD)

	COLLISION	DERAILMENT	EMPLOYEE FATALITY	PERSONAL FATALITY	GRADE CROSSING	TOTAL	HAZ. MAT. (1) INVOLVED
TRACK AND STRUCTURE DEFECTS	0	3	0	0	0	3	0
EQUIPMENT FAILURES	0	6	0	0	0	6	1
OPERATING PRACTICES	0	0	0	0	1	1	0
OTHER (2)	4	6	3	1	3	17	5
	-----	-----	-----	-----	-----	-----	-----
TOTAL	4	15	3	1	4	27	5

(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

NATIONAL TRANSPORTATION SAFETY BOARD
Washington, D.C. 20594

87-124

Reported by: AMTRAK Brief of Railroad No.: DCA-84-A-R014

Location: Queens, New York Time: 1045 ES1 Date: 7-25-84 Weather: Clear Visibility: Good

Train:	Class:	Direction:	Operating Phase:	Track No.:
1 <u>AMTRAK</u>	<u>Passenger</u>	<u>West</u>	<u>En Route</u>	<u>2 (Main)</u>
2 <u>AMTRAK</u>	<u>Passenger</u>	<u>East</u>	<u>En Route</u>	<u>2 (Main)</u>
3 _____	_____	_____	_____	_____

Accident Description:

National Railroad Passenger Corporation (Amtrak) trains Nos. 151 and 168 collided head-on on Amtrak's Hell Gate Line in the Astoria section of Queens, New York, New York. Train No. 151 was being operated westbound on the No. 2 main track by train order authority between Market Interlocking and the east end of Gate Interlocking. Train No. 168 was supposed to have been stopped and held at the home signal on No. 2 track at the west end of Gate Interlocking for the arrival of train No. 151. However, train No. 168 did not stop at the home signal but continued past Gate Interlocking. The two trains collided about 1.1 miles east of Gate Interlocking.

Probable Cause: 1. Human Failure - For Probable Cause See NTSB Publication RAR-85-09

2. _____

3. _____

Other Factors: 1. _____

2. _____

3. _____

Fatalities:	Number:	Description:	Injuries:	Number:	Description:
	<u>1</u>	<u>Passenger</u>		<u>129</u>	<u>Passengers</u>
	_____	_____		<u>8</u>	<u>Employees (Train Crew)</u>
	_____	_____		<u>3</u>	<u>Employees (Service Personnel)</u>
	_____	_____		_____	_____

Probable Cause of Casualty:

1. Crushing - internal injuries
2. _____
3. _____

Property Losses:
Railroad: \$3,199,000
Non-Railroad: _____

NATIONAL TRANSPORTATION SAFETY BOARD
Washington, D.C. 20594

Reported by: Burlington Northern Inc. Brief of Railroad No.: LAX84FR010

Location: Hooper, Washington Time: 1645 PDT Date: 07/16/84 Weather: Clear Visibility: Day/6000 FT

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

2 _____

Accident Description: Forty-two cars in westbound train No. 2/197-4 derailed in six segments at mile post 301.4. The train consisted of 4 locomotive units, 77 loaded freight cars, 42 empty cars and a caboose. A 2 1/2 ton boulder fell off a bluff on the north side of the track in a curve at mile post 301.5, disturbing the track structure under the 16th head car. The remaining 5 segments of the derailment resulted from the extreme slack action as the air brake went into emergency.

Probable Cause: 1. Damage by natural forces

2. Rockslide

Other Factors: 1. _____

Fatalities:	Number:	Description:	Injuries:	Number:	Description:
	<u>- 0 -</u>	_____		<u>2</u>	<u>Employees on duty</u>
	_____	_____		_____	_____

Probable Cause of Casualty:

- Thrown from seat/position in derailment
- _____

Property Losses:

Railroad: \$979,000

Non-Railroad: _____

NATIONAL TRANSPORTATION SAFETY BOARD
Washington, D.C. 20594

Reported by: Burlington Northern Inc. Brief of Railroad No.: LAXR4PR017

Location: Wright, Wyoming Time: 0035 MDT Date: 09/17/84 Weather: Clear Visibility: Dark/1500 FT

Train: _____ Railroad: _____ Class: _____ Direction: _____ Operating Phase: _____ Track No.: _____

1 Burlington Northern Inc. Unit Freight East In route 1

2 _____

Accident Description: Eastbound loaded unit coal train derailed 26 cars at mile post 62.3. The unit coal train was operating as No. 66MR70 with 3 locomotive units, 112 loaded cars, 1 caboose, 14,769 tons; speed of train was 44 mph at time of accident. The engineer was not aware of impending accident. Loose wheel on first car (WFA 79009) to derail was pressed on axle on Oct. 5, 1983, at Havelock, Neb. Check of pressure records revealed no reason wheel worked loose.

Probable Cause: 1. Loose wheel

2. _____

Other Factors: 1. _____

Fatalities:	Number:	Description	Injuries:	Number:	Description:
	<u>- 0 -</u>	_____		<u>- 0 -</u>	_____
	_____	_____		_____	_____

Probable Cause of Casualty:

1. _____
2. _____

Property Losses:

Railroad: 3496,000

Non-Railroad: _____

NATIONAL TRANSPORTATION SAFETY BOARD
Washington, D.C. 20594

Reported by: Burlington Northern Inc. Brief of Railroad No.: DENB4FR022

Location: Omaha, Nebraska Time: 1905 CDT Date: 09/29/84 Weather: Clear Visibility: Day/1000 FT

Train:	Railroad:	Class:	Direction:	Operating Phase:	Track No.:
1	<u>Burlington Northern Inc.</u>	<u>Yard Transfer</u>	<u>East</u>	<u>En route</u>	<u>1</u>
2	<u>Burlington Northern Inc.</u>	<u>Freight</u>	<u>West</u>	<u>En route</u>	<u>2</u>

Accident Description: A Burlington Northern Railroad Company yard assignment 217 was backing 61 cars and 1 caboose eastward on the north main track. Yard assignment 217 struck the 19th head car of train Extra 6669 West while at an end of double track switch. Extra 6669 West was moving westbound on the south main track through the end of double track switch. The accident occurred at the west end of the BN Gibson Yard at Omaha, Nebraska. The caboose and 2 cars in assignment 217 train and four cars in Extra 6669 West were derailed and damaged.

Probable Cause: 1. Failure of crew of Yard Transfer to stop at red signal
2. _____
3. _____

Other Factors: 1. Failure of the crewmembers, the yardmaster, and the dispatcher to provide radio communication

Fatalities:	Number:	Description:	Injuries:	Number:	Description:
	<u>- 0 -</u>	_____		<u>- 0 -</u>	_____
	_____	_____		_____	_____

Probable Cause of Casualty:

1. _____
2. _____

Property Losses:

Railroad:	<u>\$184,000</u>
Non-Railroad:	_____

NATIONAL TRANSPORTATION SAFETY BOARD
Washington, D.C. 20594

Reported by: Chicago and Northwestern Transportation Company Brief of Railroad No.: DEN94FR020

Location: Joice, Iowa Time: 1545 CDT Date: 08/03/84 Weather: Cloudy Visibility: Day/5000 FT

Train: Railroad: Class: Direction: Operating Phase: Track No.:

1 Chicago and Northwestern Transportation Co. Freight South En route 1

2 _____

Accident Description: Train Extra 4603 South with 4 locomotive units, 64 loaded cars, 13 empty cars, 1 caboose, 7200 tons, derailed 12 loaded hopper cars containing corn. Two of the cars came to rest in the water of Rice Lake. One piece of broken 100 pound rail rolled in 1922 was found after the derailment. The rail failure was a bolt hole type failure. The derailment occurred at mile post 129 on the Fairmont subdivision. Speed of train was 28 mph, engineer was not aware of impending accident.

Probable Cause: 1. Broken rail, fatigue failure

2. _____

Other Factors: 1. _____

Fatalities:	Number:	Description:	Injuries:	Number:	Description:
	<u>- 0 -</u>	_____		<u>- 0 -</u>	_____
	_____	_____		_____	_____

Probable Cause of Casualty:

1. _____
2. _____

Property Losses:

Railroad: \$262,000

Non-Railroad: _____

NATIONAL TRANSPORTATION SAFETY BOARD
Washington, D.C. 20594

Reported by: Consolidated Rail Corporation Brief of Railroad No.: NYC84FP03C

Location: Newark, New Jersey Time: 1730 EST Date: 08/04/84 Weather: Clear Visibility: Day/2000 FT

Train:	Railroad:	Class:	Direction:	Operating Phase:	Track No.:
1	<u>Consolidated Rail Corporation</u>	<u>Yard/switching</u>	<u>West</u>	<u>Makeup/breakup</u>	<u>2</u>
2	<u>Consolidated Rail Corporation</u>	<u>Yard/switching</u>	<u>West</u>	<u>Makeup/breakup</u>	<u>28</u>

Accident Description: Four tank cars, of an 88 car string of cars, containing liquid petroleum gas (LPG) were derailed when they were side-struck by a cab-less remote controlled locomotive that was coupled to a locomotive. Exits 14 to 15E - 15W of the New Jersey Turnpike were closed to vehicle traffic during re-railing operations. There were no injuries. A series of yard movements were made by both crews prior to the accident.

Probable Cause: 1. Failure of personnel to properly align switch to No. 2 middle track
2. _____

Other Factors: 1. _____

Fatalities:	Number:	Description:	Injuries:	Number:	Description:
	<u>- 0 -</u>	_____		<u>- 0 -</u>	_____
	_____	_____		_____	_____

Probable Cause of Casualty:

1. _____
2. _____

Property Losses:

Railroad: Unknown

Non-Railroad: _____

NATIONAL TRANSPORTATION SAFETY BOARD
Washington, D.C. 20594

Reported by: <u>Fort Worth & Denver Railway Company</u>		Brief of Railroad No.: <u>FTW84FR031</u>		
Location:	Time:	Date:	Weather:	Visibility:
<u>Clarendon, Texas</u>	<u>0330 CDT</u>	<u>09/03/84</u>	<u>Clear</u>	<u>Dark/1200 FT</u>
Train:	Railroad:	Class:	Direction:	Operating Phase: Track No.:
1 <u>Fort Worth & Denver Railway Company</u>	<u>Freight</u>	<u>West</u>	<u>En route</u>	<u>1</u>
2 _____	_____	_____	_____	_____

Accident Description: Freight train No. 01-HPS-02, consisting of 7 locomotive units and 84 cars, derailed while moving through a facing-point switch at a speed of 40 mph. The second locomotive unit split the switch and derailed. The train went about 300 ft. to a grade crossing where the general derailment of 6 locomotive units and 4 cars occurred. Three of the derailed cars were empty HAZMAT tank cars with shelf couplers, and were slightly damaged.

Probable Cause:

1. Component failure - badly worn switch point
2. Component failure - bent stock rail in switch
3. _____

Other Factors:

1. _____

Fatalities:	Number:	Description:	Injuries:	Number:	Description:
	<u>- 0 -</u>	_____		<u>- 0 -</u>	_____
	_____	_____		_____	_____

Probable Cause of Casualty:

1. _____
2. _____

Property Losses:

Railroad: \$338,000

Non-Railroad: _____

NATIONAL TRANSPORTATION SAFETY BOARD
Washington, D.C. 20594

84-129

Reported by: Illinois Central Gulf Railroad Brief of Railroad No.: ATL84TR015
 Location: Minter City, Mississippi Time: 2250 Date: 08/05/84 Weather: Cloudy Visibility: Dark/500 FT
 Train: 1 Illinois Central Gulf Railroad Class: Freight Direction: North Operating Phase: En route Track No.: 1
2
3

Accident Description: Freight Train No. 78, consisting of 3 locomotive units and 69 cars, had the three units and 12 cars derail while moving 40 mph. The engineer and head brakeman had sighted a tree lying across the track. The engineer said he thought they could safely negotiate an impact with the tree. Part of the tree lodged under the locomotive, was dragged to a turnout and wedged in the turnout, derailling the locomotive. The engineer put the train brakes into emergency application. The train went 500 more feet, hit a grade crossing and then the general derailment occurred. All three locomotive units turned over on their side. The engineer was fatally injured.

Probable Cause: 1. Human failure - crew believed tree on track was not hazardous
 2. _____
 3. _____
 Other Factors: 1. _____
 2. _____
 3. _____

Fatalities:	Number:	Description:	Injuries:	Number:	Description:
	<u>1</u>	<u>Employee on duty</u>		<u>-0-</u>	
	_____	_____		_____	_____
	_____	_____		_____	_____
	_____	_____		_____	_____

Probable Cause of Casualty:
 1. Collapse of structure (Locomotive)
 2. _____
 3. _____

Property losses:
 Railroad: \$961,000
 Non-Railroad: _____

NATIONAL TRANSPORTATION SAFETY BOARD
Washington, D.C. 20594

Reported by: Missouri Pacific Railroad Company Brief of Railroad No.: FTW84FR030

Location: Pt. Worth, Texas Time: 1530 CDT Date: 07/10/84 Weather: Cloudy Visibility: Day/5000 FT

Train: 1 Railroad: Missouri Pacific Railroad Company Class: Yard switching Direction: East Operating Phase: Unattended storage Track No.: 1

2 _____

Accident Description: Tank car GATX 50293 that was loaded with 17,300 gallons of liquid chlorine moved down a descending 2 percent grade on a stub track that served two chemical companies. GATX 50293 struck car ACPX 85287 that was connected to two 1 1/4 inch diameter unloading lines. No derailment occurred. However, the cars moved eastward and the unloading lines were broken. Gas escaped and an evacuation of an 18 square block area was ordered by police and fire authorities. Approximately 62 gallons of chlorine escaped.

Probable Cause: 1. Improperly secured tank car moved unattended on incline

2. Failure to properly set handbrakes on car

Other Factors: 1. _____

Fatalities:	Number:	Description:	Injuries:	Number:	Description:
	<u>- 0 -</u>	_____		<u>- 0 -</u>	_____
	_____	_____		_____	_____

Probable Cause of Casualty:

1. _____

2. _____

Property Losses:

Railroad: \$1,000

Non-Railroad: \$5,000

NATIONAL TRANSPORTATION SAFETY BOARD
Washington, D. C. 20594

Reported by: Missouri Pacific Railroad Company Brief of Railroad No.: DEN84FR021
 Location: Ottawa, Kansas Time: 1515 CDT Date: 08/13/84 Weather: Cloudy Visibility: Day/5000 FT
 Train: Railroad: Missouri Pacific Railroad Company Class: Freight Direction: East Operating Phase: En route Track No.: 1
 2 _____

Accident Description: Denver & Rio Grande Western (DRGW) freight train F150-13 had 11 cars derail while operating on the Missouri Pacific RR (MP) at a speed of 59 mph. The first car to derail was a box car containing 120,000 pounds of lumber stacked so that the center of gravity was 10 inches higher than allowed. The truck side bearings of the box car were also out of tolerance.

Probable Cause: 1. Improper side bearing clearance
 2. High center of gravity of lading

Other Factors: 1. _____

Fatalities:	Number:	Description:	Injuries:	Number:	Description:
	<u>- 0 -</u>	_____		<u>- 0 -</u>	_____
	_____	_____		_____	_____

Probable Cause of Casualty:

1. _____
2. _____

Property Losses:

Railroad: \$153,000
 Non-Railroad: _____

NATIONAL TRANSPORTATION SAFETY BOARD
Washington, D.C. 20594

Reported by: Missouri Pacific Railroad Company Brief of Railroad No.: FTW84FR032
 Location: Edgard, Louisiana Time: 1550 CDT Date: 09/04/84 Weather: Cloudy Visibility: Day/5000 FT
 Train: Railroad: Missouri Pacific Railroad Company Class: Freight Direction: South Operating Phase: En route Track No.: 1
 1 _____
 2 _____

Accident Description: One car in southbound freight train No. FMZ-03 derailed at mile post 37. The derailed car moved undetected to a switch at mp 37 pole 21 where 17 following cars derailed. Train speed was 57 mph. Four cars in the general derailment were loaded with hazardous material, however there was no leakage or fire. The center pin on the "A" end of JTTX 501270 was missing. Records indicate the car was shopped for repairs on April 27, 1983. Both "A" and "B" ends were jacked up, center plate shim installed and center plates lubricated.

Probable Cause: 1. Failure to install center pin
 2. Missing center pin

Other Factors: 1. _____

Fatalities:	Number:	Description:	Injuries:	Number:	Description:
	<u>- 0 -</u>	_____		<u>- 0 -</u>	_____
	_____	_____		_____	_____

Probable Cause of Casualty:

1. _____
2. _____

Property Losses:

Railroad: \$341,000
 Non-Railroad: _____

NATIONAL TRANSPORTATION SAFETY BOARD
Washington, D.C. 20594

Reported by: Norfolk Southern Ry Co. Brief of Railroad No.: ATLC4FR011

Location: Atlanta, Georgia Time: 1640 EDT Date: 7/4/84 Weather: Clear Visibility: Day/1000 FT

Train: 1 Seaboard System Railroad: Freight Class: North Direction: En route Operating Phase: 1 Track No.:

2 _____

Accident Description: Seaboard northbound train FNOHL with 5 locomotive units, 85 loaded cars, 15 empty cars, 8829 tons, derailed one car on Norfolk Southern tracks at a turnout frog, car continued derailed for one mile when two additional cars derailed. The derailed cars struck concrete pillars which supported an overhead walkway which collapsed and also struck the World Congress building. Heavy damage to non-railroad facilities. Speed of train was 5 mph. Engineer was not aware of impending accident.

Probable Cause: 1. Excessive locomotive power, train handling, caused wheel climb

2. _____

Other Factors: 1. Excessive locomotive units on train, violation of Seaboard System S.I. #15

Fatalities:	Number:	Description:	Injuries:	Number:	Description:
	<u>- 0 -</u>	_____		<u>- 0 -</u>	_____
	_____	_____		_____	_____

Probable Cause of Casualty:

1. _____

2. _____

Property Losses:

Railroad: \$ 140,000

Non-Railroad: \$1,000,000

84-139

NATIONAL TRANSPORTATION SAFETY BOARD
Washington, D.C. 20594

Reported by: Norfolk Southern Ry Co. Brief of Railroad No.: CH184FR010

Location: Catlin, Illinois Time: 1347 CDT Date: 08/30/84 Weather: Clear Visibility: Day/500 FT

Train: Railroad: Class: Direction: Operating Phase: Track No.:

1 Norfolk Southern Ry Co. Freight East En route 1

2 _____

Accident Description: Train No. DN 78 struck a maintenance of way Caterpillar-type tractor working along the side of the track. The tractor operator was killed and a laborer nearby was seriously injured. The train consisted of 4 locomotive units and 64 cars, and was moving about 40 mph. The fireman saw the tractor and alerted the engineer who made an emergency brake application.

Probable Cause: 1. Human failure - tractor operator did not secure time to work near track

2. _____

3. _____

Other Factors: 1. _____

Fatalities:	Number:	Description	Injuries:	Number:	Description:
	<u>- 1 -</u>	<u>Employee on duty</u>		<u>- 1 -</u>	<u>Employee on duty</u>
	_____	_____		_____	_____

Probable Cause of Casualty:

1. Train struck tractor

2. _____

Property Losses:

Railroad: \$1,000

Non-Railroad: 2,000

NATIONAL TRANSPORTATION SAFETY BOARD
Washington, D.C. 20594

Reported by: <u>San Francisco Municipal Railway</u>		Brief of Railroad No.: <u>LAX84FR015</u>		
Location:	Time:	Date:	Weather:	Visibility:
<u>San Francisco, California</u>	<u>1640 PDT</u>	<u>08/12/84</u>	<u>Clear</u>	<u>Day/5280 FT</u>
Train:	Railroad:	Class:	Direction:	Operating Phase: Track No.:
<u>1</u>	<u>San Francisco Municipal Railway</u>	<u>Cable car</u>	<u>South outbound</u>	<u>En route</u> <u>1</u>

Accident Description: A 1977 Chevrolet Camaro collided head-on with a San Francisco Municipal Railway Cable Car in the vicinity of Hyde and Francisco Streets in the City of San Francisco, CA. The driver of the automobile was the sole occupant; he was pronounced dead at the scene. Twenty-eight passengers and both crewmen were treated at local hospitals. Twenty-five of the passengers and both crewmen were released; one passenger sustained serious injuries. Several witnesses saw the automobile stopped at the intersection of Hyde and Chestnut Streets. The driver was observed to peer intently downhill in the direction of the cable car. The automobile accelerated rapidly upon starting, turned northbound and crossed directly into the path of the on-coming southbound cable car. The speed of the automobile was estimated at between 50 and 60 mph at the point of impact. The maximum speed limit for automobile traffic is 25 mph in this area. Acceleration increased up to the point of impact; there were no skid or scuff marks to indicate an attempt was made to stop. Post accident inspection of the vehicle found the braking systems, carburetor, linkage, motor mounts and gas pedal to be in good operation prior to the accident.

Probable Cause: 1. Willful act of individual (auto driver)
 2. Human failure (auto driver) - suicide

Other Factors: 1. _____

Fatalities:	Number:	Description	Injuries:	Number:	Description:
	<u>1</u>	<u>Auto operator</u>		<u>28</u>	<u>Cable car passengers</u>
				<u>2</u>	<u>Employees on duty</u>

Probable Cause of Casualty:

1. Auto struck cable car
2. _____

Property Losses:

Railroad:	<u>\$20,000</u>
Non-Railroad:	<u>\$3,000</u>

NATIONAL TRANSPORTATION SAFETY BOARD
Washington, D.C. 20594

84-119

Reported by: Seaboard System RR Inc. Brief of Railroad No.: ATL-84-FR012
 Location: McBee, South Carolina Time: 0700 EDT Date: 07-11-84 Weather: Clear Visibility: Day/100 ft.
 Train: Railroad: Class: Direction: Operating Phase: Track No.:
 1 Amtrak Passenger North En Route 1
 2 _____
 3 _____

Accident Description:

Tractor trailer tank truck containing gasoline stopped on grade crossing protected by railroad crossing signs and was struck by Amtrak train # 82. Engineer and truck driver were killed; fireman seriously injured; 4 passengers with minor injuries. Truck destroyed by fire. Train scorched by fire. Car on sidings and a tree obstructed view of truck driver. Speed of train was 70 mph.

Probable Cause: 1. System design inadequacy - vehicle sight distance restricted at grade crossing
 2. _____
 3. _____

Other Factors: 1. Inaudibility caused by truck cab noise
 2. _____
 3. _____

Fatalities:	Number:	Description:	Injuries:	Number:	Description:
	<u>1</u>	<u>Engineer</u>		<u>1</u>	<u>Fireman (Serious)</u>
	<u>1</u>	<u>Truckdriver</u>		<u>4</u>	<u>Passengers (Minor)</u>
	_____	_____		_____	_____
	_____	_____		_____	_____

Probable Cause of Casualty:
 1. Train struck gasoline truck.
 2. _____
 3. _____

Property Losses:
 Railroad: \$441,000
 Non-Railroad: 100,000

NATIONAL TRANSPORTATION SAFETY BOARD
Washington, D.C. 20594

Reported by: Seaboard System RR Inc. Brief of Railroad No.: ATL84FR013

Location: Atlanta, Georgia Time: 1343 EDT Date: 07/14/84 Weather: Clear Visibility: Day/5000 FT

Train:	Railroad:	Class:	Direction:	Operating Phase:	Track No.:
1	<u>Seaboard System RR Inc.</u>	<u>Yard Transfer</u>	<u>North</u>	<u>En route</u>	<u>4</u>
2					

Accident Description: Northbound yard transfer train with 5 locomotive units, 73 loaded cars, 46 empty cars, 9683 tons, speed 9 mph, derailed 6 cars as train was entering yard track No. R-4 at Tilford Yard. The 6 derailed cars included 2 tank cars of hazardous material. Alcohol and acrylic acid was spilled from the cars. There was no evacuation necessary. Engineer was not aware of impending accident. Crew members on the locomotive stated they felt a run-in slack buff force immediately prior to their train air brakes going into undesired emergency mode due to the derailment. Engineer had applied a 23 pound air brake reduction prior to buff force.

Probable Cause: 1. Train handling, excessive buff force caused rail gauge to widen
2. _____

Other Factors: 1. _____

Fatalities:	Number:	Description:	Injuries:	Number:	Description:
	<u>- 0 -</u>	_____		<u>- 0 -</u>	_____
		_____			_____

Probable Cause of Casualty: 1. _____
2. _____

Property Losses:
Railroad: \$212,000
Non-Railroad: _____

NATIONAL TRANSPORTATION SAFETY BOARD
Washington, D.C. 20594

84-126

Reported by: Seaboard System RR Inc. Brief of Railroad No.: ATL84IR014

Location: Goose Creek, South Carolina Time: 2229 EDT Date: 07/26/84 Weather: Clear Visibility: Dark/1000 FT

Train:	Class:	Direction:	Operating Phase:	Track No.:
1 <u>Amtrak</u>	<u>Passenger</u>	<u>North</u>	<u>En route</u>	<u>1</u>
2 _____	_____	_____	_____	_____
3 _____	_____	_____	_____	_____

Accident Description:

Northbound Amtrak train No. 88 struck a 1976 Datsun pickup truck, with driver and passenger, at Mount Holly Road crossing. Mount Holly Road is a dirt road crossing the Seaboard Systems double track main line at approximately 90 degrees. Crossing was equipped with two standard crossbuck signs and two standard stop signs. Truck was westbound. Engine crew stated truck pulled up on track and stopped, male driver jumped out and was not injured, female passenger did not get out. Speed of train was 70 mph, brakes applied prior to impact.

Probable Cause:

1. Failure to stop at protected grade crossing
2. Error in judgement by vehicle operator
3. _____

Other Factors:

1. _____
2. _____
3. _____

Fatalities:	Number:	Description:	Injuries:	Number:	Description:
	<u>- 1 -</u>	<u>Pickup truck passenger</u>		<u>- 0 -</u>	_____
	_____	_____		_____	_____
	_____	_____		_____	_____

Probable Cause of Casualty:

1. Struck by train
2. _____
3. _____

Property Losses:

Railroad:	<u>\$1,000</u>
Non-Railroad:	<u>\$4,000</u>

NATIONAL TRANSPORTATION SAFETY BOARD
Washington, D.C. 20594

84-136

Reported by: Seaboard System RR Inc. Brief of Railroad No.: ATL84FR016
 Location: Tucker, Georgia Time: 2055 EDT Date: 08-14-84 Weather: Clear Visibility: dawn/dusk
 Train: Class: Direction: Operating Phase: Track No.:
 1 Seaboard System RR Inc. Freight East En route 1
 2 Seaboard System RR Inc. Freight East Standing 2
 3 _____

Accident Description: Eastbound train No. FMEHR-14 had the 58th through the 63rd head cars derail while moving through a siding at a reported speed of 10 mph. The train was passing a local freight train, No. FATGW, that occupied the main track. The derailed cars struck the 4th through the 47th cars of train No. FATGW and derailed them. One car that was loaded with sodium chlorate partly spilled and caught fire. Fire was quickly extinguished by DeKalb County Fire Department. Two empty tank cars that last contained phosphoric acid were not damaged. There was a change of cross level of 4 inches in a distance of 51 feet of the point of derailment.

-22-

Probable Cause: 1. Irregular track cross level caused wheel to climb over rail
 2. _____
 3. _____

Other Factors: 1. _____
 2. _____
 3. _____

Fatalities:	Number:	Description:	Injuries:	Number:	Description:
	<u>-0-</u>	_____		<u>-0-</u>	_____
	_____	_____		_____	_____
	_____	_____		_____	_____
	_____	_____		_____	_____

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

Property Losses:
 Railroad: \$147,000
 Non-Railroad: _____

NATIONAL TRANSPORTATION SAFETY BOARD
Washington, D.C. 20594

84-145

Reported by: <u>Southeastern Pennsylvania Transp. Auth.</u>		Brief of Railroad No.: <u>NYC84FR032</u>		
Location: <u>Trenton, New Jersey</u>	Time: <u>0640 EDT</u>	Date: <u>09/06/84</u>	Weather: <u>Clear</u>	Visibility: <u>Dawn/Unknown</u>
Train:	Class:	Direction:	Operating Phase:	Track No.:
1 <u>Southeastern Pennsylvania Transp. Auth.</u>	<u>Passenger</u>	<u>West</u>	<u>Enroute</u>	<u>5</u>
2 _____	_____	_____	_____	_____
3 _____	_____	_____	_____	_____

Accident Description:

Commuter Train No. 503 was departing the Trenton Station when a late-arriving passenger ran across the platform and attempted to board the moving train. A car inspector saw the passenger and called to him not to do it. The passenger fell and was dragged between the train and platform and was fatally injured. The doors have an automatic mode which starts to close them when the train starts to move.

Probable Cause:

1. Human failure - passenger fell while boarding moving train.
2. _____
3. _____

Other Factors:

1. _____
2. _____
3. _____

Fatalities:	Number:	Description:	Injuries:	Number:	Description:
	<u>1</u>	<u>Passenger</u>		<u>-0-</u>	_____
	_____	_____		_____	_____
	_____	_____		_____	_____
	_____	_____		_____	_____

Probable Cause of Casualty:

1. Fell from train
2. _____
3. _____

Property Losses:

Railroad: -0-
Non-Railroad: -0-

NATIONAL TRANSPORTATION SAFETY BOARD
Washington, D.C. 20594

Reported by: Southern Pacific Transportation Company Brief of Railroad No.: LAX84F2007

Location: Pigeon, Utah Time: 1515 MST Date: 07/01/84 Weather: Clear Visibility: Day/6000 FT

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

2 _____

Accident Description: Westbound train No. 01-UPSFF-30 with 4 locomotive units, 75 loaded cars, 12 empty cars, 1 caboose, 7288 tons, speed 43 mph, derailed 21 cars at mile post 685.1. The conductor and rear brakeman who were in the caboose received minor injuries during the derailment. One tank car of hazardous materials was involved in the derailment but tank did not rupture. Severe buff forces occurred when the train went into an undesired emergency brake application. Engineer was not aware of impending accident.

Probable Cause: 1. Derailed from emergency brake application after air hose separated.
2. _____

Other Factors: 1. _____

Fatalities:	Number:	Description:	Injuries:	Number:	Description:
	<u>- 0 -</u>	_____		<u>2</u>	<u>Employees on duty</u>
	_____	_____		_____	_____

Probable Cause of Casualty:

1. _____

2. _____

Property Losses:

Railroad: \$1,379,000

Non-Railroad: _____

NATIONAL TRANSPORTATION SAFETY BOARD
Washington, D.C. 20594

Reported by: Southern Pacific Transportation Company Brief of Railroad No.: LAX24FR008
 Location: Williams, California Time: 1715 PDT Date: 07/02/84 Weather: Clear Visibility: Day/100 FT
 Train: Railroad: Class: Direction: Operating Phase: Track No.:
 1 Southern Pacific Transportation Co. Yard switching West En route 1
 2 _____

Accident Description: Westbound light engine Extra 3405 (Woodland Switcher) at a speed of 46.3 mph collided with a vehicle that was traveling westbound on Meyers Road at mile post 120. The vehicle operator, a Colusa County Deputy Sheriff, was fatally injured. The vehicle speed was estimated to be between 5 and 10 mph. An advance warning sign is located approximately 544 feet in advance of the crossing. The crossing is protected by reflectorized crossback signs on each side of the intersection. There was no derailment, fire, or hazardous material involved.

Probable Cause: 1. Failure of a person to detect approaching train
 2. _____

Other Factors: 1. _____

Fatalities:	Number:	Description:	Injuries:	Number:	Description:
	<u>- 1 -</u>	<u>Vehicle Operator</u>		<u>- 0 -</u>	_____
	_____	_____		_____	_____

Probable Cause of Casualty:
 1. Struck by train
 2. _____

Property Losses:
 Railroad: \$1,000
 Non-Railroad: \$7,000

84-122

NATIONAL TRANSPORTATION SAFETY BOARD
Washington, D.C. 20594

Reported by: Southern Pacific Transportation Company Brief of Railroad No.: LAX84PR011

Location: Tubac, Arizona Time: 1935 MST Date: 07/19/84 Weather: Clear Visibility: Day/2640 FT

Train: Railroad: Class: Direction: Operating Phase: Track No.:

1 Southern Pacific Transportation Co. Local Freight West En route 1

2 _____

Accident Description: Four locomotive units and six loaded freight cars in the Nogales Local, Extra 7818 west, derailed at mile post 1025.95. The train was midway across a bridge when the engineer detected a wash out of track subgrade and ballast adjacent to the west abutment and extending under the track. The engineer and brakeman felt the track sag and observed the lead unit uncouple from the second unit. The general derailment followed. There were no injuries or hazardous materials involved.

Probable Cause: 1. Roadbed washout

2. Washout from rain and/or erosion

Other Factors: 1. _____

Fatalities:	Number:	Description:	Injuries:	Number:	Description:
	<u>- 0 -</u>	_____		<u>- 0 -</u>	_____
	_____	_____		_____	_____

Probable Cause of Casualty:

1. _____

2. _____

Property Losses:

Railroad: \$522,000

Non-Railroad: _____

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NATIONAL TRANSPORTATION SAFETY BOARD
Washington, D.C. 20594

Reported by: Southern Pacific Transportation Company Brief of Railroad No.: LAX84PR012

Location: Oakdale, California Time: 1950 PDT Date: 07/21/84 Weather: Clear Visibility: Dark/300 FT

Train:	Railroad:	Class:	Direction:	Operating Phase:	Track No.:
1	<u>Southern Pacific Transportation Company</u>	<u>Local freight</u>	<u>West</u>	<u>En route</u>	<u>1</u>
2	_____	_____	_____	_____	_____

Accident Description: Freight Train No. Extra 3825 was westbound through a residential area when the engineer was shot in the head. He fell from the control area and the head brakeman stopped the train. Three juveniles standing on a sidehill cut allegedly shot the engineer.

Probable Cause: 1. Locomotive engineer shot by juvenile
2. _____

Other Factors: 1. _____

Fatalities:	Number:	Description:	Injuries:	Number:	Description:
	<u>1</u>	<u>Employee on duty</u>		<u>- 0 -</u>	_____
	_____	_____		_____	_____

Probable Cause of Casualty:

1. Gunshot wound to head
2. _____

Property Losses:

Railroad: - 0 -
Non-Railroad: _____

NATIONAL TRANSPORTATION SAFETY BOARD
Washington, D.C. 20594

Reported by: Southern Pacific Transportation Company Brief of Railroad No.: LAX84FR013

Location: Guadalupe, California Time: 0345 PDT Date: 08/05/84 Weather: Clear Visibility: Dark/500 FT

Train: 1 Southern Pacific Transportation Co. Railroad: Freight Class: East Direction: En route Operating Phase: 1 Track No.:

2 _____

Accident Description: Twenty empty freight cars in eastbound train No. 01-WJYUP04 derailed near mile post 268.73 which is located north of Guadalupe. Train speed was between 30 and 35 mph. The body center plate from the "A" end of the suspected car CATX 93481, exhibited abnormal wear patterns indicative of having been out of the truck bolster and riding on the rim. The center plate was broken.

Probable Cause: 1. Failure of the center plate

2. _____

Other Factors: 1. _____

Fatalities:	Number:	Description:	Injuries:	Number:	Description:
	<u>- 0 -</u>	_____		<u>- 0 -</u>	_____
	_____	_____		_____	_____

Probable Cause of Casualty:

1. _____

2. _____

Property Losses:

Railroad: \$497,000

Non-Railroad: _____

NATIONAL TRANSPORTATION SAFETY BOARD
Washington, D.C. 20594

Reported by: Southern Pacific Transportation Company Brief of Railroad No.: LAX84FR014

Location: Grass Lake, California Time: 1405 PDT Date: 08/08/84 Weather: Clear Visibility: Day/400 FT

Train: Railroad: Class: Direction: Operating Phase: Track No.:

1 Southern Pacific Transportation Company Freight West En route 2

2 _____

Accident Description: A roadway machine operator, 55 years old, was struck and fatally injured by train Extra 9375 West which was moving 36 mph. A track gang was operating several roadway machines on a track adjacent to the main track. As the train approached the work area, in a 3 degree curve, the tamper operator stepped from behind the tamper and walked too close to the main track, where he was struck by the train. The train whistle was blowing and the bell was ringing.

Probable Cause: 1. Failure of roadway machine operator to stand in the clear of the moving train

2. _____

Other Factors: 1. _____

Fatalities:	Number:	Description:	Injuries:	Number:	Description:
	<u>1</u>	<u>Employee on duty</u>		<u>- 0 -</u>	_____
	_____	_____		_____	_____

Probable Cause of Casualty:

1. Struck by train
2. _____

Property Losses:

Railroad: - 0 -

Non-Railroad: _____

NATIONAL TRANSPORTATION SAFETY BOARD
Washington, D.C. 20594

Reported by: Union Pacific Railroad Company Brief of Railroad No.: LAX84PR016
 Location: Parrier, Nevada Time: 1645 MDT Date: 08/19/84 Weather: Rain Visibility: Day/500 FT
 Train: Railroad: Class: Direction: Operating Phase: Track No.:
 1 Union Pacific Railroad Company Freight Unit West En route 1
 2 _____ Train _____ _____ _____

Accident Description: One locomotive and 26 loaded coal cars in westbound unit coal train No. NVPW-78 derailed at mile post 393.90. Train speed was 35 mph. There were no injuries. As the locomotive rounded the west end of the 2 degree 3 minute left hand curve, the engineer observed water and debris on the track ahead. The engineer initiated an emergency application of the automatic air brakes. Prior to the accident, a reported 5 inches of rain had fallen in a 2 hour period.

Probable Cause: 1. Failure of earthdike due to excessive rainfall
 2. _____

Other Factors: 1. _____

Fatalities:	Number:	Description:	Injuries:	Number:	Description:
	<u>- 0 -</u>	_____		<u>- 0 -</u>	_____
	_____	_____		_____	_____

Probable Cause of Casualty:
 1. _____
 2. _____

Property Losses:
 Railroad: \$977,000
 Non-Railroad: _____