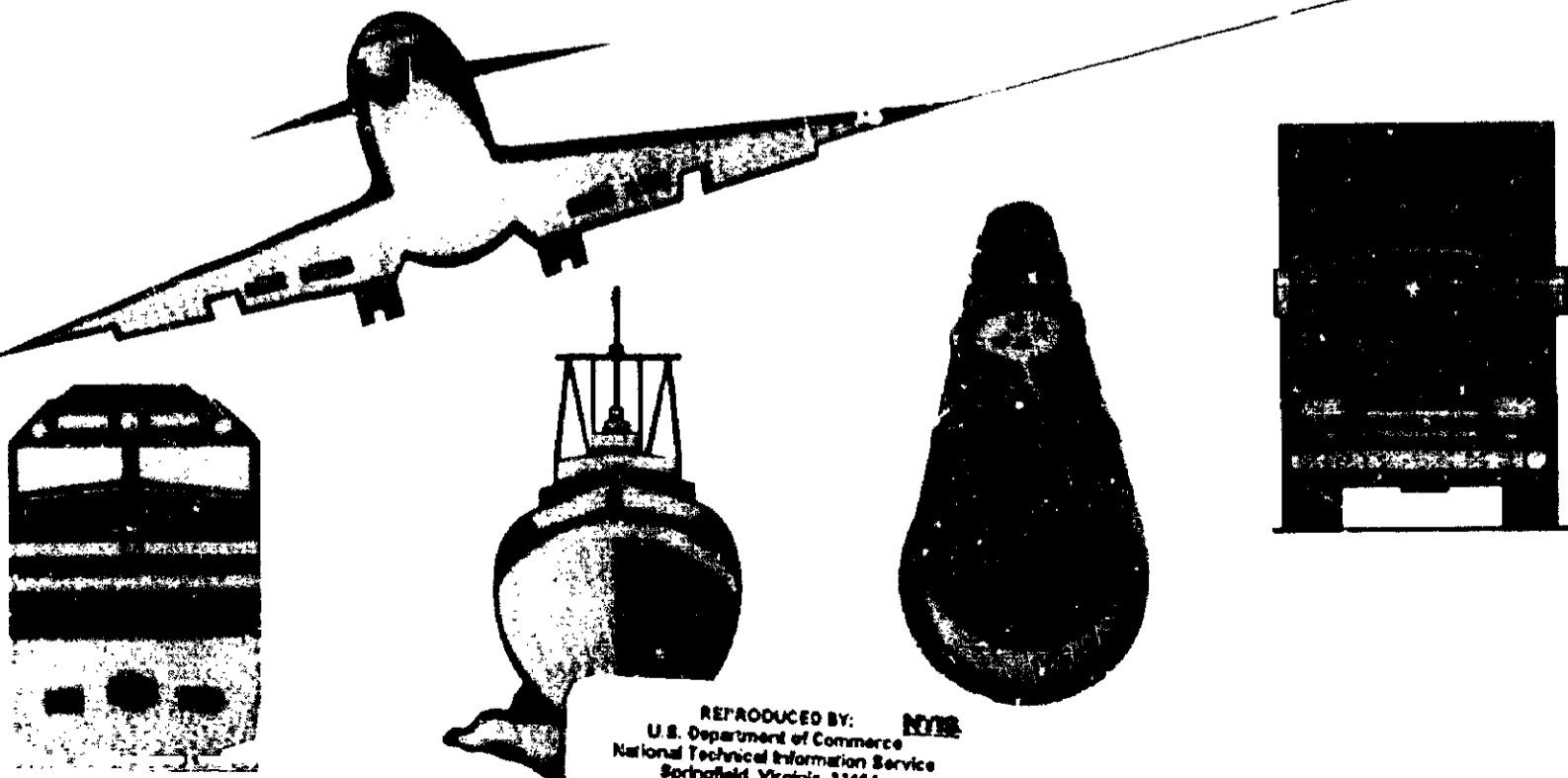


PB96-917203
NTSB/RAB-96/03

PB96-917203
NTSB/RAB-96/03

NATIONAL TRANSPORTATION SAFETY BOARD

RAILROAD ACCIDENT REPORTS BRIEF FORMAT OF 1994 ACCIDENTS



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TECHNICAL REPORT DOCUMENTATION PAGE

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FOREWORD

The National Transportation Safety Board is the Federal agency that has oversight responsibility for safety in railroad, highway, pipeline/hazardous materials, marine, and civil aviation transportation. Congress enacted the Independent Safety Board Act of 1974, which established the Safety Board as an independent agency of the Federal Government and broadened the Safety Board's investigative role in the modes of surface transportation.

The act authorizes the Safety Board to investigate and to determine the facts, conditions, circumstances, and probable cause of accidents; issue safety recommendations; conduct special studies on transportation safety; assess the effectiveness of other Government agencies' accident investigation techniques with respect to transportation safety; and evaluate the adequacy of safeguards and procedures for transporting hazardous materials.

In accordance with the provisions of the act, the Safety Board has determined the probable causes of the railroad accidents reported in this publication. These accident briefs, arranged in file number order, are published on a calendar year basis and include summaries of investigations conducted by the Safety Board's railroad regional offices. The briefs also contain data extracted from major accident investigation reports, which are indicated by reference to published Safety Board accident reports.

Safety Board accident briefs are subject to the provisions of 49 U.S. Code 1903(c), which states:

No part of any report, 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.

Collisions between trains are treated as one accident. An analysis is done on each train involved in a collision, resulting in two (or more) railroad accident records per accident. Consequently, when compiling information on accidents involving train collisions, the number of accident records will exceed the number of accidents.

The accident briefs contain essential information that should satisfy most requirements of those who use these reports. Readers who want more detailed information can consult the original factual reports for both regional and major accidents. These reports are on file in the Washington, D.C., office of the Safety Board and can be reproduced for a fee, covering reproduction cost and postage. Orders for material also are subject to a user charge for special services, and such charge will be included in the bill.

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National Transportation Safety Board
Public Inquiries Section, RE-50
490 L'Enfant Plaza East, S.W.
Washington, D.C. 20594

EXPLANATORY NOTES

Scope

The accidents reported in this publication were incidental to railroad operations that fall within the scope of section 304 of the Independent Safety Board Act of 1974. As provided in that section, the Safety Board investigates and determines facts, conditions, circumstances, and probable cause of any railroad accident involving a fatality, substantial property damage, or a passenger train. The following definitions as set forth in part 840 of the Safety Board's regulations (49 Code of Federal Regulations 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, as well as 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 refers to 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:

1. Damage of \$150,000 or more to railroad and nonrailroad property.
2. Damage of \$25,000 or more to a passenger train.

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RAILROAD ACCIDENT REPORTS

BRIEF FORMAT

1994 ACCIDENTS

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # DCA94MR003

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 588

01/13/94

LAKELAND, FL

Time (Lcl) - 0908 EST

---Basic Information---

Reporting Railroad - CSX	Property Losses	Injuries			
Type of Accident - DERAILMENT	Railroad - \$ 5,500,000.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 0.00	Employees 0	0	0	3
Method of Operation - TRAFFIC CONTROL	Fire - NO	Passengers 2	0	15	133
TIMETABLE		Motorist 0	0	0	0
		Other 0	0	0	0

CSX - CSX TRANSPORTATION

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - RBBB	No. Loco. Units - 3	Front End - 3
Type of Train - N/A	No. Cars/Caboose - 53/0	Rear End - 0
Train ID - W923	End of Train Monitor - MARKER	Toxicology Performed - YES
Direction - EAST	Length (Feet) - N/A	Radio Communications
Speed (Est.) - 40	Trailing Tons - N/A	Radio Available - YES
Speed (Auth.) - 50	Loco. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - 0/19	

RBBB - RINGLING BROS. AND BARNUM & BAILEY CIRCUS

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLOUDY, FOG	Last Departure Point	Involved - NO
Condition of Light - DAYLIGHT	TAMPA, FL	Cars Involved - 0
	Destination	Track Information
Evacuation - YES	ORLANDO, FL	Type/No. of Tracks - MAIN/2
		Gradient - DES. 1.05
		Alignment - TANGENT

---Narrative---

AN RBBB CIRCUS TRAIN, OPERATING AS TRAIN NO. W923 ON CSXT MAIN TRACK, HAD 19 CARS DERAIL WHILE MOVING 40 MPH ON 50 MPH TRACK. A WITNESS OBSERVED THE TRAIN GO BY AND SAW 2 PIECES OF A WHEEL FLY OFF A PASSENGER CAR AND LAND IN NEARBY WOODS. THE TRAIN CONTINUED 2.7 MILES, ACROSS 5 GRADE CROSSINGS, WITH THE BROKEN WHEEL. WHEN IT REACHED A TURNOUT, 15 OTHER PASSENGER CARS AND 3 FREIGHT CARS DERAILED. TWO CIRCUS EMPLOYEES WERE KILLED, AND 15 RECEIVED MINOR INJURIES. INVESTIGATION REVEALED THE BROKEN WHEEL WAS A STRAIGHT PLATE, TREAD BRAKED WHEEL. THERE WAS FATIGUE FAILURE OF THE THERMALLY DAMAGED WHEEL DUE TO FATIGUE CRACKING THAT INITIATED AT A STRESS RAISER ASSOCIATED WITH A STAMPED CHARACTER ON THE WHEEL RIM. TOXICOLOGICAL TESTING OF THE TRAIN CREW INDICATED THE PRESENCE OF MARIJUANA AND COCAINE METABOLITE IN THE BLOOD AND URINE OF THE BRAKEMAN AT LEVELS CONSISTENT WITH DRUG IMPAIRMENT.

BRIEF OF ACCIDENT, continued

File No. - 588

01/13/94

LAKELAND, FL

Time (Lcl) - 0908 EST

Occurrence #1 - TRAIN COMPONENT SYSTEM/FAILURE/MALFUNCTION
Phase - MAINTAINING SPEED

Finding(s)

1. WHEEL(S) - DEFECT, INTERNAL
 2. WHEEL(S) - THERMAL DAMAGE
 3. WHEEL(S) - FATIGUED
 4. WHEEL(S) - CRACKED
 5. WHEEL(S) - BROKEN
 6. IMPAIRMENT (drugs) - ROAD PASSENGER BRAKEMEN/FLAGMAN
-

Occurrence #2 - DERAILMENT
Phase - MAINTAINING SPEED

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the fatigue failure of a thermally damaged wheel due to fatigue cracking that initiated at a stress raiser
associated with a stamped character on the wheel rim.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # LAX94FR004

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 389

01/18/94

COWEN, WV

Time (Lcl) - 2340 EST

---Basic Information---

Reporting Railroad - CSX	Property Losses	Injuries			
Type of Accident - DERAILMENT	Railroad - \$ 1,399,937.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 50,000.00	Employees 0	0	0	2
Method of Operation - TIMETABLE	Fire - NO	Passengers 0	0	0	0
TRACK WARRANT CONT		Motorist 0	0	0	0
		Other 0	0	0	0

CSX - CSX TRANSPORTATION

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew information
Railroad - CSX	No. Loco. Units - 2	Front End - 2
Type of Train - FREIGHT	No. Cars/Caboose - 90/0	Rear End - 0
Train ID - EXTRA 8700 EAST	End of Train Monitor - MONITOR	Toxicology Performed - YES
Direction - EAST	Length (Feet) - 5070	Radio Communications
Speed (Est.) - 45	Trailing Tons - 11800	Radio Available - YES
Speed (Auth.) - 25	Loco. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - 59/61	

CSX - CSX TRANSPORTATION

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - NO
Condition of Light - DARK	COWEN, WV	Cars Involved - 0
	Destination	Track Information
	GRAFTON, WV	Type/No. of Tracks - MAIN/1
Evacuation - NO		Gradient - DES. 2.33
		Alignment - CURVE 12 D 0 M

---Narrative---

CSX COAL TRAIN EXTRA 8700 EAST HAD 61 CARS DERAIL WHEN IT RAN OUT OF CONTROL AT 45 MPH DOWN A 3.8 MILE DESCENDING GRADE THAT WAS UP TO 2.33 PERCENT IN ONE AREA. THE TEMPERATURE WAS 15 DEGREES BELOW ZERO. THE DYNAMIC BRAKES WOULD NOT FUNCTION PROPERLY DUE TO SNOW BUILD UP ON THE RAILS. TESTING OF THE REMAINING CARS THAT WERE NOT DESTROYED AFTER THE ACCIDENT REVEALED THAT SEVERAL OF THE CARS HAD BRAKES THAT WERE NOT ADEQUATELY MAINTAINED AND COULD NOT FUNCTION PROPERLY IN THE EXTREME COLD WEATHER CONDITIONS. THESE CARS ARE PRIVATELY OWNED BY A POWER COMPANY AND ARE OPERATED ONLY ON CSX.

BRIEF OF ACCIDENT, continued

File No. - 589

01/18/94

COWEN, WY

Time (Lcl) - 2340 EST

Occurrence #1 - DERAILMENT
Phase - ACCELERATING

Finding(s)

1. WEATHER - SNOW
 2. WEATHER - TEMPERATURE EXTREMES
 3. DYNAMIC BRAKES - ICING CONDITIONS
 4. ABDW BRAKE EQUIPMENT - DEFECTIVE
 5. BRAKE CYLINDER - LEAK
 6. EQUIPMENT MAINTENANCE - INADEQUATE - SHIPPER
-

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the loss of the locomotive dynamic brakes due to snow accumulation on the rails, the failure of individual car
brakes that did not function properly in the extreme cold weather, and the lack of maintenance on the privately owned
cars.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # NYC94FR005

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 590

01/22/94

HARRISBURG, PA

Time (Lcl) - 0353 EST

---Basic Information---

Reporting Railroad - CR	Property Losses	Injuries			
Type of Accident - EMPLOYEE FATALITY	Railroad - \$ 0.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 0.00	Employees 1	1	0	2
Method of Operation - TRAFFIC CONTROL	Fire - NO	Passengers 0	0	0	0
TIMETABLE		Motorist 0	0	0	0
		Other 0	0	0	0

CR - CONSOLIDATED RAIL CORPORATION

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - CR	No. Loco. Units - 3	Front End - 2
Type of Train - PASSENGER	No. Cars/Caboose - 28/0	Rear End - 0
Train ID - MAIL-	End of Train Monitor - MONITOR	Toxicology Performed - YES
Direction - EAST	Length (Feet) - 1820	Radio Communications
Speed (Est.) - 28	Trailing Tons - 1680	Radio Available - YES
Speed (Auth.) - 30	Loco. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - N/A	

CR - CONSOLIDATED RAIL CORPORATION

---Environment/Operational Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - SNOW	Last Departure Point	Involved - NO
Condition of Light - DARK	HARRISBURG, PA	Cars Involved - 0
	Destination	Track Information
	PHILADELPHIA, PA	Type/No. of Tracks - MAIN/2
Evacuation - NO		Gradient - LEVEL
		Alignment - TANGENT

---Narrative---

A CR SIGNAL MAINTAINER AND A MAINTENANCE OF WAY WELDER FOREMAN WERE CLEANING SNOW FROM SWITCHES AT AN INTERLOCKING WHEN THEY WERE STRUCK BY AN EASTBOUND AMTRAK MAIL TRAIN MOVING 28 MPH ON 30 MPH TRACK. THE MAINTAINER WAS FATALLY INJURED AND THE WELDER WAS SERIOUSLY INJURED. A CONDUCTOR ON A CR FREIGHT TRAIN, MOVING WESTWARD ON THE ADJACENT MAIN TRACK, SHOUTED TO THE TWO EMPLOYEES THAT THE MAIL TRAIN WAS APPROACHING JUST PRIOR TO THE ACCIDENT. THE 2 EMPLOYEES ACKNOWLEDGED HIS WARNING. INVESTIGATION REVEALED THAT THE TWO MEN DID NOT MOVE OFF THE TRACK, AND THEY DID NOT OBSERVE THE APPROACHING MAIL TRAIN. SAFETY RULES REQUIRE EMPLOYEES WORKING ON ACTIVE TRACKS TO BE ALERT TO APPROACHING TRAINS AT ALL TIMES. THERE WAS 15 INCHES OF SNOW ON THE GROUND AND THE TEMPERATURE WAS 15 DEGREES.

BRIEF OF ACCIDENT, continued

File No. - 590

01/22/94

HARRISBURG, PA

Time (Lcl) - 0353 EST

Occurrence #1 - FATALITY, EMPLOYEE
Phase - MAINTAINING SPEED

Finding(s)

1. SAFETY RULES - NOT COMPLIED - SIGNALMAN/SIGNAL MAINTAINER
 2. INATTENTIVE - SIGNALMAN/SIGNAL MAINTAINER
 3. SAFETY RULES - NOT COMPLIED - FOREMAN (skilled labor)
 4. INATTENTIVE - FOREMAN (skilled labor)
-

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the failure of the two employees to heed a warning that a train was approaching and their failure to be alert to
approaching trains, due to their inattentiveness.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # LAX94FR005

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 591

01/30/94

FREMONT, CA

Time (Lcl) - 1733 PST

---Basic Information---

Reporting Railroad - UP	Property Losses	Injuries			
Type of Accident - DERAILMENT	Railroad - \$ 1,614,999.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 0.00	Employees 0	0	0	2
Method of Operation - AUTOMATIC BLOCK TRAFFIC CONTROL	Fire - YES	Passengers 0	0	0	0
		Motorist 0	0	0	0
		Other 0	0	0	0

UP - UNION PACIFIC RAILROAD COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - UP	No. Loco. Units - 4	Front End - 2
Type of Train - FREIGHT	No. Cars/Caboose - 32/0	Rear End - 0
Train ID - EXTRA 6190 WEST	End of Train Monitor - MONITOR	Toxicology Performed - YES
Direction - WEST	Length (Feet) - 2864	Radio Communications
Speed (Est.) - 28	Trailing Tons - 2459	Radio Available - YES
Speed (Auth.) - 30	Loco. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - 0/1	

UP - UNION PACIFIC RAILROAD COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - YES
Condition of Light - DUSK	STOCKTON, CA	Cars Involved - 1
	Destination	Track Information
Evacuation - NO	OAKLAND, CA	Type/No. of Tracks - MAIN/1
		Gradient - LEVEL
		Alignment - CURVE 6 D 0 M

---Narrative---

UP FREIGHT TRAIN EXTRA 6190 WEST HAD ONE CAR DERAIL WHILE MOVING 28 MPH ON 30 MPH TRACK THROUGH A 6 DEGREE CURVE. THE DERAILED CAR WAS A 5 UNIT DOUBLE STACK CONTAINER CAR. THE CAR STRUCK A BRIDGE. A CONTAINER LOADED WITH DRUMS OF VARIOUS HAZARDOUS MATERIALS WENT INTO ALAMEDA CREEK WHERE IT BROKE OPEN AND CAUGHT ON FIRE, CONTAMINATING ABOUT 2.5 MILLION GALLONS OF WATER. SIX MORE CONTAINERS WENT THROUGH A FENCE AND CAME TO REST BLOCKING THE BAY AREA RAPID TRANSIT LINE. INVESTIGATION REVEALED THE CAR'S CENTER PLATE WAS NOT PROPERLY LUBRICATED AND THERE WAS INSUFFICIENT SIDE BEARING CLEARANCE ON ONE OF THE TRUCKS. THERE WERE ROTTED CROSSTIES AND LOOSE SPIKES IN THE TRACK BED AT THE DERAILMENT SITE. THE INSIDE RAIL IN THE CURVE HAD BEEN FORCED OUTWARD AND THE CAR WHEELS FELL BETWEEN THE RAILS, STARTING THE DERAILMENT.

BRIEF OF ACCIDENT, continued

File No. - 591

01/30/94

FREMONT, CA

Time (Lcl) - 1733 PST

Occurrence #1 - DERAILMENT
Phase - MAINTAINING SPEED

Finding(s)

1. CROSSSTIES - ROTTED/WEATHERED
 2. SPIKES AND RAIL FASTENERS - LOOSE
 3. TRACK MAINTENANCE - INADEQUATE - MAINTENANCE OF WAY INSPECTOR
 4. CENTER PLATE LUBRICATION - MISSING
 5. TRUCK(S) - BINDING (MECHANICAL)
 6. RAIL - OVERTURNED
-

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the rail in a curve turned over due to forces created by a combination of poorly maintained track and a skewed truck that resulted from a center plate with no lubrication.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # CHI94FR007A

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 592

02/10/94

ANDERSON, MO

Time (Lcl) - 1340 CST

---Basic Information---

Reporting Railroad - KCS	Property Losses	Injuries			
Type of Accident - COLLISION, HEAD-ON	Railroad - \$ 1,178,547.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 0.00	Employees 0	2	1	0
Method of Operation - TRAFFIC CONTROL	Fire - NO	Passengers 0	0	0	0
TIMETABLE		Motorist 0	0	0	0
		Other 0	1	1	0

KCS - KANSAS CITY SOUTHERN RAILWAY COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - KCS	No. Loco. Units - 1	Front End - 3
Type of Train - LOCAL FREIGHT	No. Cars/Caboose - 13/0	Rear End - 0
Train ID - EXTRA 705 SOUTH	End of Train Monitor - MONITOR	Toxicology Performed - YES
Direction - SOUTH	Length (Feet) - 841	Radio Communications
Speed (Est.) - 26	Trailing Tons - 1298	Radio Available - YES
Speed (Auth.) - 0	Loco. Destroy/Derailed - 1/1	Operational - YES
	Cars Destroy/Derailed - 4/5	

KCS - KANSAS CITY SOUTHERN RAILWAY COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - NO
Condition of Light - DAYLIGHT	PITTSBURG, KS	Cars Involved - 0
	Destination	Track Information
Evacuation - NO	SILOAM SPRINGS, AR	Type/No. of Tracks - MAIN/1
		Gradient - ASC. 0.90
		Alignment - CURVE 4 D 4 M

---Narrative---

KCS LOCAL FREIGHT TRAIN EXTRA 705 SOUTH COLLIDED HEAD ON WITH KCS FREIGHT TRAIN EXTRA 741 NORTH ON THE SINGLE MAIN TRACK IN A 4 DEGREE 4 MINUTE CURVE. BOTH TRAIN CREWS HAD BEEN ISSUED JOINT TRACK AND TIME AUTHORITY TO OPERATE IN THE AREA AT THE SAME TIME, AND BOTH WERE AWARE THAT THE OTHER HAD THE SAME ORDERS. THE DISPATCHER DID NOT ISSUE ANY MEET INSTRUCTIONS, NOR WAS HE REQUIRED TO DO SO, ALTHOUGH HE TOLD THE CREW OF 705 THAT HE EXPECTED THEY WOULD ARRIVE AT ANDERSON BEFORE 741. THE CREW OF 741 DID NOT HEAR THAT CONVERSATION, AND THE DISPATCHER DID NOT TALK TO THEM ABOUT THE 2 TRAINS MEETING. THE 2 TRAIN CREWS DID NOT ATTEMPT TO CONTACT EACH OTHER, AND THEY WERE NOT REQUIRED TO DO SO. KCS TRACK AND TIME OPERATING RULES REQUIRE THAT TRAINS MOVE AT RESTRICTED SPEED IN THIS SITUATION. PREPARING TO STOP IN 1/2 THE RANGE OF VISION, NOT EXCEEDING 20 MPH. TRAIN 705 WAS MOVING 26 MPH AND 741 WAS AT 19 MPH JUST PRIOR TO IMPACT IN THE CURVE.

BRIEF OF ACCIDENT, continued

File No. - 592

02/10/94

ANDERSON, MO

Time (Lcl) - 1340 CST

Occurrence #1 - COLLISION, HEAD-ON
Phase - ACCELERATING

Finding(s)

1. RESTRICTED SPEED - NOT COMPLIED - ENTIRE TRAIN CREW
 2. INFORMATION INSUFFICIENT - TRAIN DISPATCHER
 3. OPERATING RULES - INADEQUATE - EXECUTIVES AND OFFICIALS
 4. PROCEDURE INADEQUATE - EXECUTIVES AND OFFICIALS
 5. INADEQUATE RULE - COMPANY OPERATOR/MGMT
-

Occurrence #2 - DERAILMENT
Phase - STOPPING

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the inadequate operating procedures that permitted an overlap of train movement authority on the same track
without any provisions for train separation, and the failure of both train crews to comply with restricted speed rules
and slow their trains to a speed that would allow them to stop within 1/2 the range of vision.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # CHI94FR007B

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 592

02/10/94

ANDERSON, MO

Time (Lcl) - 1340 CST

---Basic Information---

Reporting Railroad - KCS	Property Losses	Injuries			
Type of Accident - COLLISION, HEAD-ON	Railroad - \$ 1,178,547.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 0.00	Employees 0	1	1	0
Method of Operation - TRAFFIC CONTRGL	Fire - NO	Passengers 0	0	0	0
TIMETABLE		Motorist 0	0	0	0
		Other 0	2	1	0

KCS - KANSAS CITY SOUTHERN RAILWAY COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - KCS	No. Loco. Units - 3	Front End - 2
Type of Train - FREIGHT	No. Cars/Caboose - 81/0	Rear End - 0
Train ID - EXTRA 741 NORTH	End of Train Monitor - MONITOR	Toxicology Performed - YES
Direction - NORTH	Length (Feet) - 5074	Radio Communications
Speed (Est.) - 19	Trailing Tons - 5011	Radio Available - YES
Speed (Auth.) - 0	Loco. Destroy/Derailed - 0/3	Operational - YES
	Cars Destroy/Derailed - 1/4	

KCS - KANSAS CITY SOUTHERN RAILWAY COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - NO
Condition of Light - DAYLIGHT	HEAVENER, OK	Cars Involved - 0
	Destination	Track Information
Evacuation - NO	PITTSBURG, KS	Type/No. of Tracks - MAIN/1
		Gradient - DES. 0.90
		Alignment - CURVE 4 D 4 M

---Narrative---

KCS LOCAL FREIGHT TRAIN EXTRA 705 SOUTH COLLIDED HEAD ON WITH KCS FREIGHT TRAIN EXTRA 741 NORTH ON THE SINGLE MAIN TRACK IN A 4 DEGREE 4 MINUTE CURVE. BOTH TRAIN CREWS HAD BEEN ISSUED JOINT TRACK AND TIME AUTHORITY TO OPERATE IN THE AREA AT THE SAME TIME, AND BOTH WERE AWARE THAT THE OTHER HAD THE SAME ORDERS. THE DISPATCHER DID NOT ISSUE ANY MEET INSTRUCTIONS, NOR WAS HE REQUIRED TO DO SO, ALTHOUGH HE TOLD THE CREW OF 705 THAT HE EXPECTED THEY WOULD ARRIVE AT ANDERSON BEFORE 741. THE CREW OF 741 DID NOT HEAR THAT CONVERSATION, AND THE DISPATCHER DID NOT TALK TO THEM ABOUT THE 2 TRAINS MEETING. THE 2 TRAIN CREWS DID NOT ATTEMPT TO CONTACT EACH OTHER, AND THEY WERE NOT REQUIRED TO DO SO. KCS TRACK AND TIME OPERATING RULES REQUIRE THAT TRAINS MOVE AT RESTRICTED SPEED IN THIS SITUATION, PREPARING TO STOP IN 1/2 THE RANGE OF VISION, NOT EXCEEDING 20 MPH. TRAIN 705 WAS MOVING 26 MPH AND 741 WAS AT 19 MPH JUST PRIOR TO IMPACT IN THE CURVE.

BRIEF OF ACCIDENT, continued

File No. - 592

02/10/94

ANDERSON, MO

Time (Lcl) - 1340 CST

Occurrence #1 - COLLISION, HEAD-ON
Phase - MAINTAINING SPEED

Finding(s)

1. RESTRICTED SPEED - NOT COMPLIED - ENTIRE TRAIN CREW
 2. INFORMATION INSUFFICIENT - TRAIN DISPATCHER
 3. OPERATING RULES - INADEQUATE - EXECUTIVES AND OFFICIALS
 4. PROCEDURE INADEQUATE - EXECUTIVES AND OFFICIALS
 5. INADEQUATE RULE - COMPANY OPERATOR/MGMT
-

Occurrence #2 - DERAILMENT
Phase - STOPPING

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the inadequate operating procedures that permitted an overlap of train movement authority on the same track
without any provisions for train separation, and the failure of both train crews to comply with restricted speed rules
and slow their trains to a speed that would allow them to stop within 1/2 the range of vision.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # NYC94FR006

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 593

02/09/94

CASTLE ROCK, CO

Time (Lcl) - 1050 MST

---Basic Information---

Reporting Railroad - ATSF	Property Losses	Injuries			
Type of Accident - EMPLOYEE FATALITY	Railroad - \$ 0.00	Fatal	Serious	Minor	None
Operating Phase - N/A	Non-Railroad - \$ 0.00	Employees 1	0	0	6
Method of Operation - TRACK WARRANT CONT	Fire - NO	Passengers 0	0	0	0
		Motorist 0	0	0	0
		Other 0	0	0	0

ATSF - ATCHISON, TOPEKA AND SANTA FE RAILWAY COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - ATSF	No. Loco. Units - 1	Front End - 2
Type of Train - WORK TRAIN	No. Cars/Caboose - 4/1	Rear End - 0
Train ID - WKS06109	End of Train Monitor - MARKER	Toxicology Performed - YES
Direction - NORTH	Length (Feet) - 400	Radio Communications
Speed (Est.) - 3	Trailing Tons - 200	Radio Available - YES
Speed (Auth.) - 0	Loco. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - N/A	

ATSF - ATCHISON, TOPEKA AND SANTA FE RAILWAY COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - NO
Condition of Light - DAYLIGHT	CASTLE ROCK, CO	Cars Involved - 0
	Destination	Track Information
Evacuation - NO	CASTLE ROCK, CO	Type/No. of Tracks - MAIN/1
		Gradient - LEVEL
		Alignment - TANGENT

---Narrative---

A SANTA FE MAINTENANCE OF WAY WELDER WAS FATALLY INJURED WHEN WORK TRAIN WKS06109 COLLIDED WITH HIS HI RAIL VEHICLE. THE HI RAIL VEHICLE WAS STANDING ON TRACK UNATTENDED WHILE THE WELDER AND HIS PARTNER, A BRIDGE INSPECTOR, WERE REMOVING MATERIAL FROM THE REAR STORAGE BED. THE WORK TRAIN FROM SOUTH TO NORTH CONSISTED OF A JORDAN SPREADER, A LOCOMOTIVE, 2 GONDOLAS, AND A CABOOSE. THE BRAKEMAN WAS IN THE FIREMAN'S SEAT ON THE LOCOMOTIVE AND THE CONDUCTOR WAS A QUARTER MILE AWAY IN HIS PERSONAL VEHICLE. THE ENGINEER WAS UNABLE TO SEE THE TRACK AHEAD AS THE TRAIN PROCEEDED NORTH AT ABOUT 3 MPH. THE M OF W WORKERS WERE REMOVING SIGN POSTS IN ADVANCE OF THE JORDAN SPREADER. THERE WAS NO EMPLOYEE ON THE LEADING CAR OR IN ADVANCE OF THE MOVEMENT TO PROVIDE PROTECTION, AS IS REQUIRED BY ATSF OPERATING RULES. ALSO, THE M OF W WORKERS DID NOT POST A LOOKOUT TO PROVIDE PROTECTION FROM TRAIN MOVEMENTS, AS IS REQUIRED BY THE RULES.

BRIEF OF ACCIDENT, continued

File No. - 593

02/09/94

CASTLE ROCK, CO

Time (Lcl) - 1050 MST

Occurrence #1 - COLLISION WITH OBJECT
Phase - MAINTAINING SPEED

Finding(s)

1. OPERATING RULES - NOT COMPLIED - ENTIRE TRAIN CREW
 2. MAINTENANCE OF WAY RULFS - NOT COMPLIED - MAINTENANCE OF WAY LABORER
-

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the failure of the train crew to provide protection in the direction of movement, and the failure of the maintenance of way employees to post a lookout.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # CHI94FR008

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 594

02/24/94

LUCAS, IA

Time (Lcl) - 0740 CST

---Basic Information---

Reporting Railroad - BN	Property Losses	Injuries			
Type of Accident - DERAILMENT	Railroad - \$ 2,577,822.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 2,500.00	Employees 0	0	0	2
Method of Operation - AUTOMATIC BLOCK	Fire - NO	Passengers 0	0	0	0
Method of Operation - TIMETABLE		Motorist 0	0	0	0
		Other 0	0	0	0

BN - BURLINGTON NORTHERN RAILROAD COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - BN	No. Loco. Units - 4	Front End - 2
Type of Train - FREIGHT	No. Cars/Caboose - 117/0	Rear End - 0
Train ID - EXTRA 2160 EAST	End of Train Monitor - MONITOR	Toxicology Performed - YES
Direction - EAST	Length (Feet) - 6201	Radio Communications
Speed (Est.) - 49	Trailing Tons - 14859	Radio Available - YES
Speed (Auth.) - 50	Loco. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - 50/52	

BN - BURLINGTON NORTHERN RAILROAD COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - NO
Condition of Light - DAYLIGHT	CRESTON, IA	Cars Involved - 0
	Destination	Track Information
Evacuation - NO	GALESBURG, IL	Type/No. of Tracks - MAIN/2
		Gradient - ASC. 0.40
		Alignment - CURVE 1 D 56 M

---Narrative---

BN UNIT COAL TRAIN EXTRA 2160 EAST HAD 52 LOADED COAL CARS DERAIL WHILE MOVING 49 MPH ON 50 MPH TRACK. THE TRAIN WAS PROCEEDING THRU A 1 DEGREE 56 MINUTE LEFT HAND CURVE AND UP A 0.4 PERCENT ASCENDING GRADE AT THE POINT OF DERAILMENT. THE ENGINEER WAS MAINTAINING SPEED WITH THROTTLE MODULATION, AND NINE SECONDS AFTER HE REDUCED THE THROTTLE, THE 10TH THROUGH 61ST CARS DERAILED. BROKEN RAIL SECTIONS AND BROKEN WHEEL FRAGMENTS WERE RECOVERED IN THE WRECKAGE AND SENT TO A LABORATORY FOR ANALYSIS. ONE OF THE BROKEN RAIL SECTIONS EXHIBITED A VERTICAL SPLIT HEAD INTERNAL DEFECT. METALLURGICAL ANALYSIS OF THIS RAIL INDICATED THAT THE INTERNAL DEFECT DEVELOPED FROM HIGH LEVELS OF NONMETALLIC INCLUSIONS FOUND IN THE RAIL HEAD, AND WAS NOT DETECTED DURING TRACK INSPECTIONS. THE BN HAD SCHEDULED TO REPLACE THE WORN RAIL IN THE CURVE ON JUNE 20, 1994.

BRIEF OF ACCIDENT, continued

File No. - 594

02/24/94

LUCAS, IA

Time (Lcl) - 0740 CST

Occurrence #1 - TRACK COMPONENT SYSTEM/FAILURE/MALFUNCTION
Phase - INCREASING POWER

Finding(s)

1. RAIL, CONTINUOUSLY WELDED - DEFECT, INTERNAL
 2. RAIL, CONTINUOUSLY WELDED - WORN
 3. RAIL, CONTINUOUSLY WELDED - BROKEN
-

Occurrence #2 - DERAILMENT
Phase - INCREASING POWER

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the rail broke at an undetected internal defect under the dynamic forces of the moving train.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # LAX94FR006

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 595

02/24/94

LANGTRY, TX

Time (Lcl) - 2150 CDT

---Basic Information---

Reporting Railroad - SP	Property Losses		Injuries			
Type of Accident - DERAILMENT	Railroad - \$ 1,090,000.00	Employees	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 0.00	Passengers	0	0	0	2
Method of Operation - TRAFFIC CONTROL	Fire - YES	Motorist	0	0	0	0
TIMETABLE		Other	0	0	0	0

SP - SOUTHERN PACIFIC TRANSPORTATION COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - SP	No. Loco. Units - 6	Front End - 2
Type of Train - FREIGHT	No. Cars/Caboose - 24/0	Rear End - 0
Train ID - EXTRA 7244 WEST	End of Train Monitor - MONITOR	Toxicology Performed - YES
Direction - WEST	Length (Feet) - 7253	Radio Communications
Speed (Est.) - 46	Trailing Tens - 7063	Radio Available - YES
Speed (Auth.) - 45	Loco. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - 4/5	

SP - SOUTHERN PACIFIC TRANSPORTATION COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - NO
Condition of Light - DARK	DEL RIO, TX	Cars Involved - 0
	Destination	Track Information
Evacuation - YES	SANDERSON, TX	Type/No. of Tracks - MAIN/1
		Gradient - DES. 1.06
		Alignment - CURVE 0 D 0 M

---Narrative---

SP FREIGHT TRAIN EXTRA 7244 WEST HAD 5 CARS DERAIL WHILE MOVING 46 MPH ON 45 MPH TRACK. THE DERAILMENT OCCURRED ON A 1.06 PERCENT DESCENDING GRADE IN A 4 DEGREE 45 MINUTE CURVE. THE 5 CARS THAT DERAILED WERE ON THE REAR OF THE TRAIN, AND WERE ARTICULATED CONTAINER CARS CONSISTING OF 25 ARTICULATED UNITS. INVESTIGATION REVEALED THAT A TRUCK CENTER PLATE ON THE FIRST CAR TO DERAIL DID NOT HAVE LUBRICATION. THE TRUCK WAS BINDING IN THE CURVE AND TIPPED A RAIL OUTWARD, THEN THE WHEELS DROPPED BETWEEN THE RAILS, STARTING THE GENERAL DERAILMENT.

BRIEF OF ACCIDENT, continued

File No. - 595

02/24/94

LANGTRY, TX

Time (Lcl) - 2150 CDT

Occurrence #1 - DERAILMENT
Phase - ACCELERATING

Finding(s)

1. CENTER PLATE LUBRICATION - MISSING
 2. TRUCK(S) - BINDING (MECHANICAL)
 3. WHEEL(S) - PRESSURE EXCESSIVE
 4. RAIL - OVERTURNED
-

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
a dry center plate on a car which resulted in the wheels binding in a curve and tipping the rail over.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # NYC94FR007A

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 596

02/26/94

FLORA, MS

Time (Lcl) - 1345 CST

---Basic Information---

Reporting Railroad - IC	Property Losses	Injuries			
Type of Accident - COLLISION, HEAD-ON	Railroad - \$ 743,509.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 0.00	Employees 1	1	0	0
Method of Operation - MANUAL BLOCKS	Fire - NO	Passengers 0	0	0	0
Method of Operation - YARD RULES		Motorist 0	0	0	0
		Other 0	2	0	0

IC - ILLINOIS CENTRAL RAILROAD COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - IC	No. Loco. Units - 2	Front End - 2
Type of Train - FREIGHT	No. Cars/Caboose - 117/0	Rear End - 0
Train ID - EXTRA 6131 NORTH	End of Train Monitor - MARKER	Toxicology Performed - YES
Direction - NORTH	Length (Feet) - 7809	Radio Communications
Speed (Est.) - 34	Trailing Tons - 8447	Radio Available - YES
Speed (Auth.) - 0	Loco. Destroy/Derailed - 2/2	Operational - YES
	Cars Destroy/Derailed - 14/15	

IC - ILLINOIS CENTRAL RAILROAD COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - NO
Condition of Light - DAYLIGHT	JACKSON, MS	Cars Involved - 0
	Destination	Track Information
Evacuation - NO	FLORA, MS	Type/No. of Tracks - MAIN/1
		Gradient - DES. 0.20
		Alignment - CURVE 1 D 30 M

---Narrative---

IC FREIGHT TRAIN EXTRA 6131 NORTH, MOVING 34 MPH WHEN IT SHOULD HAVE BEEN STOPPED, COLLIDED HEAD ON WITH IC FREIGHT TRAIN EXTRA 6152 SOUTH, MOVING 25 MPH ON 49 MPH TRACK. ALL 4 CREWMEMBERS FROM BOTH TRAINS JUMPED FROM THE LOCOMOTIVES JUST BEFORE IMPACT. THE ENGINEER OF 6131 DIED FROM INJURIES RECEIVED WHEN HE JUMPED FROM THE MOVING TRAIN. 6131 WAS MOVING TOWARD CYNTHIA WHEN THE DISPATCHER GAVE THE CREW A TRACK PERMIT THAT ALLOWED THEM TO PROCEED TO CYNTHIA AND WAIT FOR THE ARRIVAL OF 6152, THEN PROCEED PAST CYNTHIA. WHEN 6131 ARRIVED AT CYNTHIA, THE TRAIN PROCEEDED PAST THE STATION BECAUSE THE CREW BELIEVED THAT 6152 HAD ALREADY TERMINATED AT JACKSON YARD BEFORE THE DISPATCHER GAVE THEM THE TRACK PERMIT TO CYNTHIA. THE CREW OF 6131 DID NOT QUESTION THE DISPATCHER'S INSTRUCTIONS. TOXICOLOGICAL TESTING OF THE CREWS REVEALED THE PRESENCE OF MARIJUANA IN THE URINE OF THE CONDUCTOR OF 6152 AT A LEVEL OF 23 NG/ML.

BRIEF OF ACCIDENT, continued

File No. - 596

02/26/94

FLORA, MS

Time (Lcl) - 1345 CST

Occurrence #1 - COLLISION, HEAD-ON
Phase - MAINTAINING SPEED

Finding(s)

1. TRACK WARRANT - NOT COMPLIED - ENTIRE TRAIN CREW
 2. INATTENTIVE - ENTIRE TRAIN CREW
 3. USE OF DRUGS - CREW MEMBER OF OTHER TRAIN
-

Occurrence #2 - DERAILMENT
Phase - STOPPING

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the failure of the crew of Extra 6131 North to comply with the track permit which instructed them to stop at Cynthia until Extra 6152 South had arrived.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # NYC94FR007B

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 596

02/26/94

FLORA, MS

Time (Lcl) - 1345 CST

---Basic Information---

Reporting Railroad - IC	Property Losses	Injuries			
Type of Accident - COLLISION, HEAD-ON	Railroad - \$ 642,000.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 0.00	Employees 0	2	0	0
Method of Operation - MANUAL BLOCKS	Fire - NO	Passengers 0	0	0	0
TIMETABLE		Motorist 0	0	0	0
		Other 1	1	0	0

IC - ILLINOIS CENTRAL RAILROAD COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - IC	No. Loco. Units - 2	Front End - 2
Type of Train - FREIGHT	No. Cars/Caboose - 116/0	Rear End - 0
Train ID - EXTRA 6152 SOUTH	End of Train Monitor - MARKER	Toxicology Performed - YES
Direction - SOUTH	Length (Feet) - 5288	Radio Communications
Speed (Est.) - 25	Trailing Tons - 4883	Radio Available - YES
Speed (Auth.) - 49	Loco. Destroy/Derailed - 2/2	Operational - YES
	Cars Destroy/Derailed - 6/8	

IC - ILLINOIS CENTRAL RAILROAD COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - NO
Condition of Light - DAYLIGHT	MEMPHIS, TN	Cars Involved - 0
	Destination	Track Information
Evacuation - NO	JACKSON, MS	Type/No. of Tracks - MAIN/1
		Gradient - ASC. 0.20
		Alignment - CURVE 1 D 30 M

---Narrative---

IC FREIGHT TRAIN EXTRA 6131 NORTH, MOVING 34 MPH WHEN IT SHOULD HAVE BEEN STOPPED, COLLIDED HEAD ON WITH IC FREIGHT TRAIN EXTRA 6152 SOUTH, MOVING 25 MPH ON 49 MPH TRACK. ALL 4 CREWMEMBERS FROM BOTH TRAINS JUMPED FROM THE LOCOMOTIVES JUST BEFORE IMPACT. THE ENGINEER OF 6131 DIED FROM INJURIES RECEIVED WHEN HE JUMPED FROM THE MOVING TRAIN. 6131 WAS MOVING TOWARD CYNTHIA WHEN THE DISPATCHER GAVE THE CREW A TRACK PERMIT THAT ALLOWED THEM TO PROCEED TO CYNTHIA AND WAIT FOR THE ARRIVAL OF 6152, THEN PROCEED PAST CYNTHIA. WHEN 6131 ARRIVED AT CYNTHIA, THE TRAIN PROCEEDED PAST THE STATION BECAUSE THE CREW BELIEVED THAT 6152 HAD ALREADY TERMINATED AT JACKSON YARD BEFORE THE DISPATCHER GAVE THEM THE TRACK PERMIT TO CYNTHIA. THE CREW OF 6131 DID NOT QUESTION THE DISPATCHER'S INSTRUCTIONS. TOXICOLOGICAL TESTING OF THE CREWS REVEALED THE PRESENCE OF MARIJUANA IN THE URINE OF THE CONDUCTOR OF 6152 AT A LEVEL OF 23 NG/ML.

BRIEF OF ACCIDENT, continued

File No. - 596

02/26/94

FLORA, MS

Time (Lcl) - 1345 CST

Occurrence #1 - COLLISION
Phase - STOPPING

Finding(s)

1. TRACK WARRANT - NOT COMPLIED - CREW MEMBER OF OTHER TRAIN
 2. INATTENTIVE - CREW MEMBER OF OTHER TRAIN
 3. USE OF DRUGS - ROAD FREIGHT CONDUCTOR (through freight)
-

Occurrence #2 - DERAILMENT
Phase - STOPPING

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the failure of the crew of Extra 6131 North to comply with the track permit which instructed them to stop at Cynthia until Extra 6152 South had arrived.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # CHI94FR009

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 597

02/27/94

BURLINGTON, ND

Time (Lcl) - 0615 CST

---Basic Information---

Reporting Railroad - CP	Property Losses		Injuries			
Type of Accident - DERAILMENT	Railroad - \$ 1,495,961.00	Employees	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 30,000.00	Passengers	0	0	0	3
Method of Operation - TIMETABLE	Fire - YES	Motorist	0	0	0	0
RADIO		Other	0	1	1	1500

CP - CANADIAN PACIFIC RAILWAY COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - CP	No. Loco. Units - 2	Front End - 3
Type of Train - FREIGHT	No. Cars/Caboose - 58/0	Rear End - 0
Train ID - X-SOOL 6049 EAST	End of Train Monitor - MONITOR	Toxicology Performed - YES
Direction - EAST	Length (Feet) - 3683	Radio Communications
Speed (Est.) - 40	Trailing Tons - 6499	Radio Available - YES
Speed (Auth.) - 40	Loco. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - 23/26	

CP - CANADIAN PACIFIC RAILWAY COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - YES
Condition of Light - DARK	PORTAL, ND	Cars Involved - 3
	Destination	Track Information
Evacuation - YES	HARVEY, ND	Type/No. of Tracks - MAIN/1
		Gradient - ASC. 0.10
		Alignment - CURVE 2 D 30 M

---Narrative---

CP RAIL FREIGHT TRAIN EXTRA SOOL 6049 EAST DERAILED THE 9TH THROUGH 34TH HEAD CARS NEAR MP 477.1 WHILE TRAVELING AT 40 MPH IN 40 MPH NON-SIGNALLED TERRITORY. THE 19TH HEAD CAR, PROX 99082, WAS A TANK CAR LOADED WITH BUTANE (LPG). IT SUSTAINED LARGE PUNCTURES AND THE BUTANE ESCAPED AND IGNITED, BURNING DOWN A MOBILE HOME AND 2 OUT-BUILDINGS THAT WERE NEAR THE TRACKS. TWO RESIDENTS OF THE MOBILE HOME WERE INJURED BY THE FIRE, ONE SERIOUSLY. AN EVACUATION WAS ORDERED FOR ABOUT 1500 LOCAL RESIDENTS. PIECES OF BROKEN JOINT BARS WERE DISCOVERED IN THE WRECKAGE NEAR THE POINT OF DERAILMENT. THERE WERE PRE-EXISTING CRACKS IN THE BARS. CARRIER RECORDS INDICATED THAT THERE HAD BEEN 45 BROKEN RAILS DISCOVERED AND REPAIRED DURING THE PRECEEDING 90 DAY PERIOD BETWEEN MP 470 AND MP 514. THE RAIL IN THE ACCIDENT AREA WAS 100 LB. CWR PRODUCED IN 1948 AND INSTALLED IN 1973.

BRIEF OF ACCIDENT, continued

File No. - 597

02/27/94

BURLINGTON, ND

Time (Lcl) - 0615 CST

Occurrence #1 - TRACK COMPONENT SYSTEM/FAILURE/MALFUNCTION
Phase - MAINTAINING SPEED

Finding(s)

1. JOINT BAR, NONCOMPROMISE - BROKEN
 2. INSUFFICIENT STANDARDS/REQUIREMENTS - COMPANY OPERATOR/MGMT
-

Occurrence #2 - TANK CAR PUNCTURED
Phase - STOPPING

Occurrence #3 - HAZARDOUS MATERIALS LEAK/SPILL (FUMES/SMOKE)
Phase - STOPPING

Occurrence #4 - FIRE
Phase - STOPPING

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
a joint bar or bars broke under the dynamic forces of the moving train, and the failure of the railroad to properly maintain the track structure.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # LAX94FR007

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 598

02/27/94

COLTON, CA

Time (Lcl) - 0757 PST

---Basic Information---

Reporting Railroad - SP	Property Losses	Injuries			
Type of Accident - DERAILMENT	Railroad - \$ 544,400.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 0.00	Employees 0	0	0	2
Method of Operation - AUTOMATIC BLOCK TRAFFIC CONTROL	Fire - NO	Passengers 0	0	0	0
		Motorist 0	0	0	0
		Other 0	0	0	0

SP - SOUTHERN PACIFIC TRANSPORTATION COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - SP	No. Loco. Units - 8	Front End - 2
Type of Train - FREIGHT	No. Cars/Caboose - 89/0	Rear End - 0
Train ID - EXTRA 9318 WEST	End of Train Monitor - MARKER	Toxicology Performed - NO
Direction - WEST	Length (Feet) - 5616	Radio Communications
Speed (Est.) - 29	Trailing Tons - 8036	Radio Available - YES
Speed (Auth.) - 40	Loco. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - 4/19	

SP - SOUTHERN PACIFIC TRANSPORTATION COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - YES
Condition of Light - DAYLIGHT	EUGENE, OR	Cars Involved - 4
	Destination	Track Information
Evacuation - NO	COLTON, CA	Type/No. of Tracks - MAIN/1
		Gradient - DES. 2.20
		Alignment - TANGENT

---Narrative---

SP FREIGHT TRAIN EXTRA 9318 WEST HAD 19 CARS DERAIL WHILE MOVING 29 MPH ON 40 MPH TRACK. INVESTIGATION REVEALED THAT THE FIRST CAR TO DERAIL HAD A DEFECTIVE AIR BRAKE CONTROL VALVE THAT WAS ALLOWING BRAKE PIPE PRESSURE TO LEAK INTO THE BRAKE CYLINDER, RESULTING IN STICKING BRAKES. THE BRAKE SHOES AND WHEEL THEN OVERHEATED AND METAL BEGAN TO BUILD UP ON THE WHEEL TREAD. THESE METAL SCRAPS STARTED FLAKING AND BUILDING UP AT THE WHEEL TREAD NEXT TO THE RAIL UNTIL THE BUILD UP DERAILED THE WHEEL.

BRIEF OF ACCIDENT, continued

File No. - 598

02/27/94

COLTON, CA

Time (Lcl) - 0757 PST

Occurrence #1 - DERAILMENT
Phase - MAINTAINING SPEED

Finding(s)

1. CONTROL VALVE - LEAK
 2. CONTROL VALVE - DRAGGING
 3. BRAKES - DEFECT, INTERNAL
 4. BRAKE SHOE(S) - BUILD-UP ON TREAD
 5. WHEEL(S) - BUILD-UP ON TREAD
-

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the internal failure of an air brake control valve which resulted in the overheating of the wheel and brakeshoes,
causing a build up of metal on the wheel tread.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # LAX94FR008A

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 599

03/07/94

CALIENTE, CA

Time (Lcl) - 1825 PDT

---Basic Information---

Reporting Railroad - SP	Property Losses		Injuries			
Type of Accident - COLLISION, REAR-END	Railroad - \$ 75,000.00	Employees	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 0.00	Passengers	0	0	2	0
Method of Operation - TRAFFIC CONTROL	Fire - NO	Motorist	0	0	0	0
TIMETABLE		Other	0	0	3	0

SP - SOUTHERN PACIFIC TRANSPORTATION COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - SP	No. Loco. Units - 5	Front End - 2
Type of Train - FREIGHT	No. Cars/Caboose - 78/0	Rear End - 0
Train ID - EXTRA 6796 WEST	End of Train Monitor - MONITOR	Toxicology Performed - YES
Direction - WEST	Length (Feet) - 4796	Radio Communications
Speed (Est.) - 20	Trailing Tons - 3047	Radio Available - YES
Speed (Auth.) - 25	Loco. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - N/A	

SP - SOUTHERN PACIFIC TRANSPORTATION COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - NO
Condition of Light - DUSK	COLTON, CA	Cars Involved - 0
	Destination	Track Information
Evacuation - NO	BAKERSFIELD, CA	Type/No. of Tracks - MAIN/2
		Gradient - DES. 2.50
		Alignment - CURVE 5 D 0 M

---Narrative---

SP FREIGHT TRAIN EXTRA 6796 WEST, MOVING 20 MPH WHEN IT SHOULD HAVE BEEN STOPPED, STRUCK THE REAR OF ATSF FREIGHT TRAIN EXTRA 9503 WEST THAT WAS MOVING 8 MPH ON 25 MPH TRACK. BOTH TRAINS WERE OPERATING ON SP TRACK. TRAIN 9503 HAD BEEN STOPPED AT A STOP SIGNAL AND WAS STARTING TO PROCEED WHEN IT WAS STRUCK BY 6796. 6796 HAD PASSED A SIGNAL JUST PRIOR TO THE COLLISION THAT DISPLAYED A RED STOP SIGNAL. THE CREW OF 6796 STATED THAT THEY WERE OCCUPIED WITH OBSERVING THE CARGO ON A TRAIN ON THE ADJACENT TRACK WHEN THEY WENT PAST THE STOP SIGNAL. THEY STATED THEY THOUGHT THE SIGNAL DISPLAYED A YELLOW ASPECT, BUT SIGNAL TESTS AFTER THE ACCIDENT INDICATED THE SIGNAL ASPECT WAS RED.

BRIEF OF ACCIDENT, continued

File No. - 599

03/07/94

CALIENTE, CA

Time (Lc1) - 1825 PDT

Occurrence #1 - COLLISION, REAR
Phase - STOPPING

Finding(s)

1. AUTOMATIC BLOCK SIGNAL - NOT COMPLIED - ENTIRE TRAIN CREW
 2. INATTENTIVE - ENTIRE TRAIN CREW
-

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the failure of the crew of Extra 6796 West to comply with signal indications due to their inattentiveness.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # LAX94FR008B

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 599

03/07/94

CALIENTE, CA

Time (Lcl) - 1825 PDT

---Basic Information---

Reporting Railroad - SP	Property Losses		Injuries			
Type of Accident - COLLISION, REAR-END	Railroad - \$ 97,000.00	Employees	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 0.00	Passengers	0	0	3	0
Method of Operation - TRAFFIC CONTROL	Fire - NO	Motorist	0	0	0	0
TIMETABLE		Other	0	0	2	0

SP - SOUTHERN PACIFIC TRANSPORTATION COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - ATSF	No. Loco. Units - 5	Front End - 3
Type of Train - FREIGHT	No. Cars/Caboose - 46/0	Rear End - 0
Train ID - EXTRA 9503 WEST	End of Train Monitor - MONITOR	Toxicology Performed - NO
Direction - WEST	Length (Feet) - 2559	Radio Communications
Speed (Est.) - 8	Trailing Tons - 5031	Radio Available - YES
Speed (Auth.) - 25	Loco. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - 2/3	

ATSF - ATCHISON, TOPEKA AND SANTA FE RAILWAY COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - NO
Condition of Light - DUSK	BARSTOW, CA	Cars Involved - 0
	Destination	Track Information
Evacuation - NO	BAKERSFIELD, CA	Type/No. of Tracks - MAIN/2
		Gradient - DES. 2.50
		Alignment - CURVE 5 0 0 M

---Narrative---

SP FREIGHT TRAIN EXTRA 6796 WEST, MOVING 20 MPH WHEN IT SHOULD HAVE BEEN STOPPED, STRUCK THE REAR OF ATSF FREIGHT TRAIN EXTRA 9503 WEST THAT WAS MOVING 8 MPH ON 25 MPH TRACK. BOTH TRAINS WERE OPERATING ON SP TRACK. TRAIN 9503 HAD BEEN STOPPED AT A STOP SIGNAL AND WAS STARTING TO PROCEED WHEN IT WAS STRUCK BY 6796. 6796 HAD PASSED A SIGNAL JUST PRIOR TO THE COLLISION THAT DISPLAYED A RED STOP SIGNAL. THE CREW OF 6796 STATED THAT THEY WERE OCCUPIED WITH OBSERVING THE CARGO ON A TRAIN ON THE ADJACENT TRACK WHEN THEY WENT PAST THE STOP SIGNAL. THEY STATED THEY THOUGHT THE SIGNAL DISPLAYED A YELLOW ASPECT, BUT SIGNAL TESTS AFTER THE ACCIDENT INDICATED THE SIGNAL ASPECT WAS RED.

BRIEF OF ACCIDENT, continued

File No. - 599

03/07/94

CALIENTE, CA

Time (Lcl) - 1825 PDT

Occurrence #1 - COLLISION, REAR
Phase - STARTING

Finding(s)

1. AUTOMATIC BLOCK SIGNAL - NOT OBSERVED - CREW MEMBER OF OTHER TRAIN
 2. AUTOMATIC BLOCK SIGNAL - NOT COMPLIED - CREW MEMBER OF OTHER TRAIN
 3. INATTENTIVE - CREW MEMBER OF OTHER TRAIN
-

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the failure of the crew of Extra 6796 West to comply with signal indications due to their inattentiveness.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # NYC94FR008A

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 600

03/28/94

GREENWICH, OH

Time (Lcl) - 1918 CST

---Basic Information---

Reporting Railroad - CR	Property Losses	Injuries			
Type of Accident - COLLISION, REAR-END	Railroad - \$ 59,172.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 5,000.00	Employees 0	1	1	0
Method of Operation - AUTOMATIC BLOCK	Fire - NO	Passengers 0	0	0	0
TIMETABLE		Motorist 0	0	0	0
		Other 0	0	0	2

CR - CONSOLIDATED RAIL CORPORATION

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - CR	No. Loco. Units - 2	Front End - 2
Type of Train - FREIGHT	No. Cars/Caboose - 109/0	Rear End - 0
Train ID - EXTRA 6207 EAST	End of Train Monitor - MONITOR	Toxicology Performed - YES
Direction - EAST	Length (Feet) - 7052	Radio Communications
Speed (Est.) - 28	Trailing Tons - 11132	Radio Available - YES
Speed (Auth.) - 0	Loco. Destroy/Derailed - 0/2	Operational - YES
	Cars Destroy/Derailed - 3/10	

CR - CONSOLIDATED RAIL CORPORATION

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - NO
Condition of Light - DUSK	COLUMBUS, OH	Cars Involved - 0
	Destination	Track Information
	CLEVELAND, OH	Type/No. of Tracks - MAIN/1
Evacuation - NO		Gradient - DES. 0.01
		Alignment - TANGENT

---Narrative---

CR FREIGHT TRAIN EXTRA 6207, MOVING 40 MPH WHEN IT SHOULD HAVE BEEN STOPPED, STRUCK THE REAR OF CR COAL TRAIN EXTRA 6190 EAST THAT WAS STOPPED FOR A RED INTERLOCKING HOME SIGNAL. THE INTERLOCKING AREA WAS OCCUPIED BY A CSX FREIGHT TRAIN THAT HAD STOPPED DUE TO AN EMERGENCY BRAKE APPLICATION. THE ENGINEER OF 6190 HAD DISMOUNTED THE LEAD LOCOMOTIVE AND WAS ASSISTING THE CSX ENGINEER TO DETERMINE THE CAUSE OF THE EMERGENCY BRAKING. THE ENGINEER OF 6207 STATED THE APPROACH SIGNAL WAS YELLOW AS THEIR TRAIN APPROACHED IT AND CHANGED TO GREEN BEFORE THE LOCOMOTIVE REACHED THE SIGNAL, BUT SIGNAL TESTS AFTER THE ACCIDENT INDICATED HE WOULD HAVE A YELLOW SIGNAL FOLLOWED BY A RED STOP SIGNAL. THE TRAIN WAS TRAVELING AT 40 MPH WHEN HE SAW THE REAR OF THE STOPPED TRAIN AND PLACED THE TRAIN IN EMERGENCY. THE IMPACT SPEED WAS RECORDED AT 28 MPH. THE CONDUCTOR WAS SERIOUSLY INJURED, AND THE ENGINEER SUSTAINED MINOR INJURIES.

BRIEF OF ACCIDENT, continued

File No. - 600

03/28/94

GREENWICH, OH

Time (Lcl) - 1918 CST

Occurrence #1 - COLLISION, REAR
Phase - STOPPING

Finding(s)

1. SIGNAL INDICATIONS - NOT OBSERVED - ENTIRE TRAIN CREW
 2. SIGNAL INDICATIONS - NOT COMPLIED - ENTIRE TRAIN CREW
 3. OPERATING RULES - NOT COMPLIED - ENTIRE TRAIN CREW
 4. INATTENTIVE - ENTIRE TRAIN CREW
-

Occurrence #2 - DERAILMENT
Phase - STOPPING

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the failure of the crew of Extra 6207 East to observe and comply with signal indications.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # NYC94FR008B

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 600

03/28/94

GREENWICH, OH

Time (Lcl) - 1918 CST

---Basic Information---

Reporting Railroad - CR	Property Losses	Injuries			
Type of Accident - COLLISION, REAR-END	Railroad - \$ 100,000.00	Fatal	Serious	Minor	None
Operating Phase - STANDING	Non-Railroad - \$ 0.00	Employees 0	0	0	2
Method of Operation - AUTOMATIC BLOCK	Fire - NO	Passengers 0	0	0	0
TIMETABLE		Motorist 0	0	0	0
		Other 0	1	1	0

CR - CONSOLIDATED RAIL CORPORATION

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - CR	No. Loco. Units - 2	Front End - 2
Type of Train - FREIGHT	No. Cars/Caboose - 71/0	Rear End - 0
Train ID - EXTRA 6190 EAST	End of Train Monitor - MONITOR	Toxicology Performed - YES
Direction - EAST	Length (Feet) - 5325	Radio Communications
Speed (Est.) - 0	Trailing Tons - 9230	Radio Available - YES
Speed (Auth.) - 0	Loco. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - 0/5	

CR - CONSOLIDATED RAIL CORPORATION

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - NO
Condition of Light - DUSK	WORTHINGTON, OH	Cars Involved - 0
	Destination	Track Information
Evacuation - NO	CLEVELAND, OH	Type/No. of Tracks - MAIN/1
		Gradient - DES. 0.01
		Alignment - TANGENT

---Narrative---

CR FREIGHT TRAIN EXTRA 6207, MOVING 40 MPH WHEN IT SHOULD HAVE BEEN STOPPED, STRUCK THE REAR OF CR COAL TRAIN EXTRA 6190 EAST THAT WAS STOPPED FOR A RED INTERLOCKING HOME SIGNAL. THE INTERLOCKING AREA WAS OCCUPIED BY A CSX FREIGHT TRAIN THAT HAD STOPPED DUE TO AN EMERGENCY BRAKE APPLICATION. THE ENGINEER OF 6190 HAD DISMOUNTED THE LEAD LOCOMOTIVE AND WAS ASSISTING THE CSX ENGINEER TO DETERMINE THE CAUSE OF THE EMERGENCY BRAKING. THE ENGINEER OF 6207 STATED THE APPROACH SIGNAL WAS YELLOW AS THEIR TRAIN APPROACHED IT AND CHANGED TO GREEN BEFORE THE LOCOMOTIVE REACHED THE SIGNAL, BUT SIGNAL TESTS AFTER THE ACCIDENT INDICATED HE WOULD HAVE A YELLOW SIGNAL FOLLOWED BY A RED STOP SIGNAL. THE TRAIN WAS TRAVELING AT 40 MPH WHEN HE SAW THE REAR OF THE STOPPED TRAIN AND PLACED THE TRAIN IN EMERGENCY. THE IMPACT SPEED WAS RECORDED AT 28 MPH. THE CONDUCTOR WAS SERIOUSLY INJURED, AND THE ENGINEER SUSTAINED MINOR INJURIES.

BRIEF OF ACCIDENT, continued

File No. - 600

03/28/94

GREENWICH, OH

Time (Lcl) - 1918 CST

Occurrence #1 - COLLISION, REAR
Phase - STANDING

Finding(s)

1. SIGNAL INDICATIONS - NOT OBSERVED - CREW MEMBER OF OTHER TRAIN
 2. SIGNAL INDICATIONS - NOT COMPLIED - CREW MEMBER OF OTHER TRAIN
 3. OPERATING RULES - NOT COMPLIED - CREW MEMBER OF OTHER TRAIN
 4. INATTENTIVE - CREW MEMBER OF OTHER TRAIN
-

Occurrence #2 - DERAILMENT
Phase - STANDING

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the failure of the crew of Extra 6207 East to observe and comply with signal indications.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # CHI94FRC10

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 601

04/03/94

LEESVILLE, LA

Time (Lcl) - 2330 CDT

---Basic Information---

Reporting Railroad - KCS	Property Losses	Injuries			
Type of Accident - DERAILMENT	Railroad - \$ 1,115,847.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 285,200.00	Employees 0	0	0	2
Method of Operation - TRAFFIC CONTROL	Fire - NO	Passengers 0	0	0	0
TIMETABLE		Motorist 0	0	0	0
		Other 0	0	0	0

KCS - KANSAS CITY SOUTHERN RAILWAY COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - KCS	No. Loco. Units - 3	Front End - 2
Type of Train - FREIGHT	No. Cars/Caboose - 124/0	Rear End - 0
Train ID - EXTRA 684 SOUTH	End of Train Monitor - MONITOR	Toxicology Performed - YES
Direction - SOUTH	Length (Feet) - 9137	Radio Communications
Speed (Est.) - 34	Trailing Tons - 8834	Radio Available - YES
Speed (Auth.) - 40	Loco. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - 22/22	

KCS - KANSAS CITY SOUTHERN RAILWAY COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - NO
Condition of Light - DARK	SHREVEPORT, LA	Cars Involved - 0
	Destination	Track Information
Evacuation - NO	BEAUMONT, TX	Type/No. of Tracks - MAIN/1
		Gradient - DES. 1.00
		Alignment - CURVE 2 D 0 M

---Narrative---

KCS FREIGHT TRAIN EXTRA 684 SOUTH HAD 22 CARS DERAIL WHILE MOVING 34 MPH ON 40 MPH TRACK. THE TRAIN HAD BEEN MADE UP WITH 36 LOADED CARS ON THE REAR, 33 EMPTY CARS IN THE MIDDLE OF THE TRAIN, AND 55 TRAILER CARS ON THE HEAD END THAT WERE LOADED WITH LIGHT MILITARY VEHICLES AND CONTAINERS. THE TERRAIN AT THE ACCIDENT SITE WAS UNDULATING AND CURVING. THE ENGINEER HAD USED THROTTLE MODULATION AND DYNAMIC BRAKING TO CONTROL THE SPEED OF THE TRAIN. MOVING THROUGH A CURVE ON A DESCENDING GRADE, THE ENGINEER MADE AN APPLICATION OF THE DYNAMIC BRAKES AND THE DERAILMENT OCCURRED WHEN THE SLACK RAN IN ON THE CARS OF THE TRAIN. INVESTIGATION REVEALED THE KCS DID NOT HAVE ADEQUATE RULES GOVERNING TRAIN MASS MAKEUP. ANOTHER OPERATING RULE WARNED ENGINEERS OF THE DANGERS OF USING DYNAMIC BRAKING BY ITSELF IN CURVES.

BRIEF OF ACCIDENT, continued

File No. - 601

04/03/94

LEESVILLE, LA

Time (Lcl) - 2330 CDT

Occurrence #1 - DERAILMENT
Phase - SLOWING

Finding(s)

1. MIXED TRAIN - SLACK RUN-IN
 2. TRAIN MAKEUP - IMPROPER - EXECUTIVES AND OFFICIALS
 3. INADEQUATE PROCEDURE - COMPANY OPERATOR/MGMT
 4. TRAIN OPERATION - IMPROPER - ROAD FREIGHT ENGINEER/MOTORMAN (through freight)
-

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
a heavy slack run in that resulted from poor train makeup with heavily loaded cars on the rear of the train, combined with poor train handling in using dynamic braking when train air brakes should have been used.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # CHI94FR011

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 602

04/12/94

HOUSTON, TX

Time (Lcl) - 0740 CDT

---Basic Information---

Reporting Railroad - SP	Property Losses		Injuries			
Type of Accident - EMPLOYEE FATALITY	Railroad - \$	0.00	Fatal	Serious	Minor	None
Operating Phase - SWITCHING	Non-Railroad - \$	0.00	Employees	0	0	0
Method of Operation - YARD RULES	Fire - NO		Passengers	0	0	0
TIMETABLE			Motorist	0	0	0
			Other	0	0	0

SP - SOUTHERN PACIFIC TRANSPORTATION COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - SP	No. Loco. Units - 1	Front End - 2
Type of Train - YARD	No. Cars/Caboose - 10/0	Rear End - 1
Train ID - YARD 813	End of Train Monitor - NO	Toxicology Performed - YES
Direction - WEST	Length (Feet) - 640	Radio Communications
Speed (Est.) - 4	Trailing Tons - 350	Radio Available - YES
Speed (Auth.) - 10	Loco. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - N/A	

SP - SOUTHERN PACIFIC TRANSPORTATION COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLOUDY, RAIN	Last Departure Point	Involved - NO
Condition of Light - DAYLIGHT	HOUSTON, TX	Cars Involved - 0
	Destination	Track Information
	HOUSTON, TX	Type/No. of Tracks - YARD/1
Evacuation - NO		Gradient - LEVEL
		Alignment - TANGENT

---Narrative---

A SOUTHERN PACIFIC YARD CONDUCTOR WAS FATALLY INJURED WHEN HE WAS RUN OVER BY A FREIGHT CAR ON NO. 3 TRACK IN THE WEST SHED BUILDING IN THE REPAIR TRACK AREA. INVESTIGATION INDICATED THAT THE CONDUCTOR MOUNTED THE 3RD CAR OF A 10 CAR CUT AS IT WAS BEING PULLED OUT OF THE BUILDING. NEXT TO THE TRACK IN THE SHED WAS A PROTECTIVE WIRE MESH CAGE THAT GUARDED A MACHINE. THE CONDUCTOR EITHER STRUCK THE CAGE OR HE FELL OFF TRYING TO AVOID IT. THERE WAS A CLEARANCE OF 10 INCHES BETWEEN THE CAGE AND THE SIDE OF THE CAR. THE CONDUCTOR HAD WORKED IN THE AREA ON NUMEROUS OCCASIONS, AND SHOULD HAVE BEEN AWARE OF THE CLOSE CLEARANCE. THE CONDUCTOR'S WIFE AND ANOTHER CREWMEMBER BOTH STATED THAT THE CONDUCTOR SUFFERED FROM SEVERE HEADACHES FOR WHICH HE TOOK ASPIRIN. HE HAD NEVER SOUGHT MEDICAL ATTENTION FOR THE HEADACHES. THE SWITCHMAN STATED THAT THE CONDUCTOR HAD COMPLAINED OF A HEADACHE AT ABOUT 0330 CDT DURING THEIR MEAL PERIOD.

BRIEF OF ACCIDENT, continued

File No. - 602

04/12/94

HOUSTON, TX

Time (Lcl) - 0740 CDT

Occurrence #1 - FATALITY, EMPLOYEE
Phase - PULLING CARS

Finding(s)

1. TIMETABLE SPECIAL INSTRUCTIONS - NOT COMPLIED - YARD CONDUCTOR/YARD FOREMAN
 2. INATTENTIVE - YARD CONDUCTOR/YARD FOREMAN
-

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the conductor was run over by a freight car after he had been knocked or fell off the side of a moving car where
there was limited clearance.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # NYC94FR009A

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 603

04/15/94

OLD SAYBROOK, CT

Time (Lcl) - 0651 EDT

---Basic Information---

Reporting Railroad - ATK	Property Losses	Injuries			
Type of Accident - COLLISION, HEAD-ON	Railroad - \$ 351,300.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 0.00	Employees 0	0	2	1
Method of Operation - CAB SIGNALS	Fire - NO	Passengers 0	0	12	8
AUTOMATIC TRAIN ST		Motorist 0	0	0	0
		Other 0	0	3	0

Atk - AMTRAK

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - CDT	No. Loco. Units - 1	Front End - 1
Type of Train - COMMUTER	No. Cars/Caboose - 3/0	Rear End - 2
Train ID - NO. 3639	End of Train Monitor - MARKER	Toxicology Performed - YES
Direction - WEST	Length (Feet) - 350	Radio Communications
Speed (Est.) - 10	Trailing Tons - 750	Radio Available - YES
Speed (Auth.) - 0	Loco. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - N/A	

CDT - CONN. DEPT. OF TRANSPORTATION

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - NO
Condition of Light - DAYLIGHT	OLD SAYBROOK, CT	Cars Involved - 0
	Destination	Track Information
Evacuation - NO	NEW HAVEN, CT	Type/No. of Tracks - MAIN/2
		Gradient - ASC. 0.31
		Alignment - TANGENT

---Narrative---

CDT COMMUTER TRAIN NO. 3639, MOVING WESTBOUND AT 10 MPH ON THE NO. 1 MAIN TRACK WHEN IT SHOULD HAVE BEEN STOPPED, COLLIDED HEAD ON WITH AMTRAK EQUIPMENT TRAIN NO. 3506 THAT WAS STOPPED. 3639 WAS CARRYING 20 PASSENGERS, AND 3506 WAS AN EQUIPMENT TRAIN MANNED BY AN OPERATING CREW OF 3. BOTH TRAINS CONSISTED OF A LOCOMOTIVE AND 3 COACHES. 3639 HAD PASSED A RED STOP SIGNAL AND RAN THROUGH A SWITCH LINED FOR EASTBOUND TRAIN MOVEMENT. THE ENGINEER OF 3506 SAW 3639 APPROACHING ON HIS TRACK. HE PLACED THE BRAKES IN EMERGENCY AND JUMPED FROM THE LOCOMOTIVE. NONE OF THE EQUIPMENT DERAILED. THERE WERE SEVENTEEN MINOR INJURIES TO PASSENGERS AND CREW MEMBERS. THE AUTOMATIC TRAIN CONTROL SYSTEM IN 3639 HAD NOT BEEN CUT IN BY THE ENGINEER WHEN HE HAD STARTED ON THE RUN. THE ENGINEER OF 3639 STATED HE WAS TALKING WITH AN OFF DUTY STUDENT ENGINEER WHO WAS IN THE OPERATING COMPARTMENT WHEN THEY WENT PAST THE RED SIGNAL.

BRIEF OF ACCIDENT, continued

File No. - 603

04/15/94

OLD SAYBROOK, CT

Time (Lcl) - 0651 EDT

Occurrence #1 - COLLISION, HEAD-ON
Phase - STOPPING

Finding(s)

1. BLOCK SIGNAL - NOT COMPLIED - ROAD PASSENGER ENGINEER/MOTORMAN
 2. INATTENTIVE - ROAD PASSENGER ENGINEER/MOTORMAN
 3. DIVERTED ATTENTION - ROAD PASSENGER ENGINEER/MOTORMAN
 4. SCHEDULED TRAIN - OVERSPEED
-

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the failure of the engineer of No. 3639 to have the automatic train control cut in, his failure to control the speed of his train, and his failure to observe a stop signal.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # NYC94FR009B

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 603

04/15/94

OLD SAYBROOK, CT

Time (Lcl) - 0651 EDT

---Basic Information---

Reporting Railroad - ATK	Property Losses	Injuries			
Type of Accident - COLLISION, HEAD-ON	Railroad - \$ 0.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 0.00	Employees 0	0	3	0
Method of Operation - CAB SIGNALS	Fire - NO	Passengers 0	0	0	0
AUTOMATIC TRAIN ST		Motorist 0	0	0	0
		Other 0	0	14	9

ATK - AMTRAK

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - CDT	No. Loco. Units - 2	Front End - 1
Type of Train - MAINT. EQUIPMENT	No. Cars/Caboose - 2/0	Rear End - 1
Train ID - NO. 3506	End of Train Monitor - MARKER	Toxicology Performed - YES
Direction - EAST	Length (Feet) - 350	Radio Communications
Speed (Est.) - 0	Trailing Tons - 700	Radio Available - YES
Speed (Auth.) - 10	Loco. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - N/A	

CDT - CONN. DEPT. OF TRANSPORTATION

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - NO
Condition of Light - DAYLIGHT	NEW HAVEN, CT	Cars Involved - 0
	Destination	Track Information
Evacuation - NO	OLD SAYBROOK, CT	Type/No. of Tracks - MAIN/2
		Gradient - DES. 0.31
		Alignment - TANGENT

---Narrative---

CDT COMMUTER TRAIN NO. 3639, MOVING WESTBOUND AT 10 MPH ON THE NO. 1 MAIN TRACK WHEN IT SHOULD HAVE BEEN STOPPED, COLLIDED HEAD ON WITH AMTRAK EQUIPMENT TRAIN NO. 3506 THAT WAS STOPPED. 3639 WAS CARRYING 20 PASSENGERS, AND 3506 WAS AN EQUIPMENT TRAIN MANNED BY AN OPERATING CREW OF 3. BOTH TRAINS CONSISTED OF A LOCOMOTIVE AND 3 COACHES. 3639 HAD PASSED A RED STOP SIGNAL AND RAN THROUGH A SWITCH LINED FOR EASTBOUND TRAIN MOVEMENT. THE ENGINEER OF 3506 SAW 3639 APPROACHING ON HIS TRACK. HE PLACED THE BRAKES IN EMERGENCY AND JUMPED FROM THE LOCOMOTIVE. NONE OF THE EQUIPMENT DERAILED. THERE WERE SEVENTEEN MINOR INJURIES TO PASSENGERS AND CREW MEMBERS. THE AUTOMATIC TRAIN CONTROL SYSTEM IN 3639 HAD NOT BEEN CUT IN BY THE ENGINEER WHEN HE HAD STARTED ON THE RUN. THE ENGINEER OF 3639 STATED HE WAS TALKING WITH AN OFF DUTY STUDENT ENGINEER WHO WAS IN THE OPERATING COMPARTMENT WHEN THEY WENT PAST THE RED SIGNAL.

BRIEF OF ACCIDENT, continued

File No. - 603

04/15/94

OLD SAYBROOK, CT

Time (Lcl) - 0651 EDT

Occurrence #1 - COLLISION, HEAD-ON
Phase - STOPPING

Finding(s)

1. BLOCK SIGNAL - NOT COMPLIED - ENGINEER OF OTHER TRAIN
 2. INATTENTIVE - ENGINEER OF OTHER TRAIN
 3. DIVERTED ATTENTION - ENGINEER OF OTHER TRAIN
-

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the failure of the engineer of No. 3639 to have the automatic train control cut in, his failure to control the speed of his train, and his failure to observe a stop signal.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # CHI94FR012B

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 604

04/26/94

BROKEN BOW, NE

Time (Lcl) - 2045 MDT

---Basic Information---

Reporting Railroad - BN	Property Losses		Injuries			
Type of Accident - COLLISION, SIDE	Railroad - \$ 100,000.00	Employees	Fatal	Serious	Minor	None
Operating Phase - STANDING	Non-Railroad - \$ 0.00	Passengers	0	0	0	2
Method of Operation - AUTOMATIC BLOCK TRAFFIC CONTROL	Fire - NO	Motorist	0	0	0	0
		Other	0	0	0	2

BN - BURLINGTON NORTHERN RAILROAD COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - BN	No. Loco. Units - 2	Front End - 2
Type of Train - FREIGHT	No. Cars/Caboose - 108/0	Rear End - 0
Train ID - EXTRA 5134 SOUTH	End of Train Monitor - MONITOR	Toxicology Performed - NO
Direction - SOUTH	Length (Feet) - 5858	Radio Communications
Speed (Est.) - 0	Trailing Tons - 3224	Radio Available - YES
Speed (Auth.) - 50	Loco. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - 3/21	

BN - BURLINGTON NORTHERN RAILROAD COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLOUDY	Last Departure Point	Involved - NO
Condition of Light - DARK	RAVENNA, NE	Cars Involved - 0
	Destination	Track Information
Evacuation - NO	ALLIANCE, NE	Type/No. of Tracks - MAIN/2
		Gradient - LEVEL
		Alignment - CURVE 1 D 56 M

---Narrative---

BN FREIGHT TRAIN EXTRA 8176 EAST, A LOADED UNIT COAL TRAIN, TRAVELING 48 MPH ON 50 MPH TRACK, HAD 42 CARS DERAIL AND COLLIDE WITH BN EMPTY UNIT COAL TRAIN EXTRA 5134 THAT WAS STANDING ON AN ADJACENT MAIN TRACK. THE COLLISION CAUSED THE 17TH THROUGH THE 37TH CARS OF THE STANDING TRAIN TO DERAIL. THE ENGINEER OF 8176 STATED THAT HE WAS ACCELERATING IN THROTTLE POSITION NO. 3, AND WAS PASSING THE STANDING TRAIN WHEN THE AIR BRAKES OF THE TRAIN APPLIED IN EMERGENCY AS THE TRAIN DERAILED. PIECES OF BROKEN RAIL WERE DISCOVERED IN THE AREA OF THE DERAILMENT. THE RAIL WAS SENT TO A LAB FOR METALLURGICAL TESTING, AND AN INTERNAL TRANSVERSE DEFECT WAS FOUND. THE RAIL HAD BEEN ULTRASONICALLY INSPECTED 2 MONTHS BEFORE THE ACCIDENT AND NO DEFECTS WERE NOTED AT THAT TIME.

BRIEF OF ACCIDENT, continued

File No. - 604

04/26/94

BROKEN BOW, NE

Time (Lcl) - 2045 MDT

Occurrence #1 - COLLISION, SIDE
Phase - STANDING

Finding(s)

1. RAIL, CONTINUOUSLY WELDED - BROKEN
 2. RAIL, CONTINUOUSLY WELDED - DEFECT, EXTERNAL
-

Occurrence #2 - DERAILMENT
Phase - STANDING

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
a rail broke under the loading forces of the train due to an undetected internal defect in the rail.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # CHI94FR012A

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 604

04/26/94

BROKEN BOW, NE

Time (Lcl) - 2045 MDT

---Basic Information---

Reporting Railroad - BN	Property Losses	Injuries			
Type of Accident - COLLISION, SIDE	Railroad - \$ 1,890,000.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 0.00	Employees 0	0	0	2
Method of Operation - AUTOMATIC BLOCK	Fire - NO	Passengers 0	0	0	0
TRAFFIC CONTROL		Motorist 0	0	0	0
		Other 0	0	0	2

BN - BURLINGTON NORTHERN RAILROAD COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - BN	No. Loco. Units - 3	Front End - 2
Type of Train - FREIGHT	No. Cars/Caboose - 116/0	Rear End - 0
Train ID - EXTRA 8176 EAST	End of Train Monitor - MONITOR	Toxicology Performed - YES
Direction - EAST	Length (Feet) - 6153	Radio Communications
Speed (Est.) - 48	Trailing Tons - 15593	Radio Available - YES
Speed (Auth.) - 50	Loco. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - 36/42	

BN - BURLINGTON NORTHERN RAILROAD COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLOUDY	Last Departure Point	Involved - NO
Condition of Light - DARK	ALLIANCE, NE	Cars Involved - 0
	Destination	Track Information
Evacuation - NO	RAVENNA, NE	Type/No. of Tracks - MAIN/2
		Gradient - DES. 0.35
		Alignment - CURVE 1 D 56 M

---Narrative---

BN FREIGHT TRAIN EXTRA 8176 EAST, A LOADED UNIT COAL TRAIN, TRAVELING 48 MPH ON 50 MPH TRACK, HAD 42 CARS DERAIL AND COLLIDE WITH BN EMPTY UNIT COAL TRAIN EXTRA 5134 THAT WAS STANDING ON AN ADJACENT MAIN TRACK. THE COLLISION CAUSED THE 17TH THROUGH THE 37TH CARS OF THE STANDING TRAIN TO DERAIL. THE ENGINEER OF 8176 STATED THAT HE WAS ACCELERATING IN THROTTLE POSITION NO. 3, AND WAS PASSING THE STANDING TRAIN WHEN THE AIR BRAKES OF THE TRAIN APPLIED IN EMERGENCY AS THE TRAIN DERAILED. PIECES OF BROKEN RAIL WERE DISCOVERED IN THE AREA OF THE DERAILMENT. THE RAIL WAS SENT TO A LAB FOR METALLURGICAL TESTING, AND AN INTERNAL TRANSVERSE DEFECT WAS FOUND. THE RAIL HAD BEEN ULTRASONICALLY INSPECTED 2 MONTHS BEFORE THE ACCIDENT AND NO DEFECTS WERE NOTED AT THAT TIME.

BRIEF OF ACCIDENT, continued

File No. - 604

04/26/94

BROKEN BOW, NE

Time (Lcl) - 2045 MDT

Occurrence #1 - TRACK COMPONENT SYSTEM/FAILURE/MALFUNCTION
Phase - ACCELERATING

Finding(s)

1. RAIL, CONTINUOUSLY WELDED - BROKEN
 2. RAIL, CONTINUOUSLY WELDED - DEFECT, EXTERNAL
-

Occurrence #2 - DERAILMENT
Phase - ACCELERATING

Occurrence #3 - COLLISION, SIDE
Phase - STOPPING

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
a rail broke under the loading forces of the train due to an undetected internal defect in the rail.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # DCA94MR004A

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 605

05/16/94

SELMA, NC

Time (Lcl) - 0440 EDT

---Basic Information---

Reporting Railroad - CSX
Type of Accident - COLLISION, SIDE
Operating Phase - EN ROUTE
Method of Operation - TRAFFIC CONTROL
TIMETABLE

Property Losses
Railroad - \$ 3,630,000.00
Non-Railroad - \$ 0.00
Fire - YES

	Injuries			
	Fatal	Serious	Minor	None
Employees	1	1	1	20
Passengers	0	0	119	296
Motorist	0	0	0	0
Other	0	0	0	2

CSX - CSX TRANSPORTATION

---Railroad/Personnel Information---

Train Data
Railroad - ATK
Type of Train - PASSENGER
Train ID - NO. 87
Direction - SOUTH
Speed (Est.) - 79
Speed (Auth.) - 79

Train Consist/Damage
No. Loco. Units - 2
No. Cars/Caboose - 18/0
End of Train Monitor - NO
Length (Feet) - N/A
Trailing Tons - N/A
Loco. Destroy/Derailed - 2/2
Cars Destroy/Derailed - 0/17

Crew Information
Front End - 2
Rear End - 3
Toxicology Performed - YES

Radio Communications
Radio Available - YES
Operational - YES

ATK - AMTRAK

---Environment/Operations Information---

Weather Data
Weather Condition - CLOUDY
Condition of Light - DARK

Itinerary
Last Departure Point
WASHINGTON, DC
Destination
JACKSONVILLE, FL

Hazardous Materials
Involved - NO
Cars Involved - 0
Track Information
Type/No. of Tracks - MAIN/2
Gradient - LEVEL
Alignment - TANGENT

Evacuation - YES

---Narrative---

AMTRAK PASSENGER TRAIN 87, THE SILVER METEOR, COLLIDED WITH AN INTERMODAL TRAILER THAT HAD EITHER FALLEN OR WAS FALLING FROM A FLAT CAR ON THE PASSING NORTHBOUND CSXT FREIGHT TRAIN 176. TRAIN 87 CONSISTED OF A 2 UNIT LOCOMOTIVE AND 18 CARS; 176 CONSISTED OF A 3 UNIT LOCOMOTIVE AND 52 CARS. ALL BUT THE LAST CAR OF 87 DERAILED, AND THE NEXT TO THE LAST CAR ON 176 ALSO DERAILED. ON TRAIN 87, THE ASSISTANT ENGINEER WAS KILLED, THE ENGINEER SUSTAINED SERIOUS INJURIES, AND 1 ON BOARD SERVICE CREWMEMBER AND 119 PASSENGERS RECEIVED MINOR INJURIES. THE CREW ON 176 HAD NO INJUIRES. INVESTIGATION REVEALED THAT THE INTERMODAL TRAILER WAS NOT PROPERLY SECURED ON THE FLAT CAR, AND THE SHIPPING COMPANY DID NOT HAVE IN PLACE A COMPREHENSIVE INSPECTION PROGRAM TO ASSURE THAT TRAILERS WERE PROPERLY SECURED ON FLAT CARS.

BRIEF OF ACCIDENT, continued

File No. - 605

05/16/94

SELMA, NC

Time (Lcl) - 0440 EDT

Occurrence #1 - COLLISION WITH OBJECT
Phase - MAINTAINING SPEED

Finding(s)

1. TRAILER - NOT SECURED
 2. TRAILER - STRUCK
 3. CARGO LOADING/UNLOADING - IMPROPERLY INSTALLED - SHIPPER
 4. EQUIPMENT INSPECTION - INADEQUATE - SHIPPER
 5. INADEQUATE INSPECTION - EXECUTIVES AND OFFICIALS
-

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the failure of the CSX Intermodal Corporation loading crew to properly secure the intermodal trailer to the flat car on
CSXT 176 and the failure of the CSX Intermodal Corporation to have in place a comprehensive inspection program.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # DCA94MR004B

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 605

05/16/94

SELMA, NC

Time (Lcl) - 0440 EDT

---Basic Information---

Reporting Railroad - CSX	Property Losses		Injuries			
Type of Accident - COLLISION, SIDE	Railroad - \$ 100,000.00		Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 0.00		Employees 0	0	0	2
Method of Operation - TRAFFIC CONTROL TRAIN ORDERS	Fire - YES		Passengers 0	0	0	0
			Motorist 0	0	0	0
			Other 1	1	120	316

CSX - CSX TRANSPORTATION

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - ATK	No. Loco. Units - 3	Front End - 2
Type of Train - FREIGHT	No. Cars/Caboose - 52/0	Rear End - 0
Train ID - EXTRA 6231 NORTH	End of Train Monitor - MARKER	Toxicology Performed - YES
Direction - NORTH	Length (Feet) - 6188	
Speed (Est.) - 30	Trailing Tons - 4449	Radio Communications
Speed (Auth.) - 30	Loco. Destroy/Derailed - N/A	Radio Available - YES
	Cars Destroy/Derailed - 1/1	Operational - YES

ATK - AMTRAK

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLOUDY	Last Departure Point	Involved - NO
Condition of Light - DARK	FLORENCE, SC	Cars Involved - 0
	Destination	Track Information
	RICHMOND, VA	Type/No. of Tracks - MAIN/2
Evacuation - NO		Gradient - LEVEL
		Alignment - TANGENT

---Narrative---

AMTRAK PASSENGER TRAIN 87, THE SILVER METEOR, COLLIDED WITH AN INTERMODAL TRAILER THAT HAD EITHER FALLEN OR WAS FALLING FROM A FLAT CAR ON THE PASSING NORTHBOUND CSXT FREIGHT TRAIN 176. TRAIN 87 CONSISTED OF A 2 UNIT LOCOMOTIVE AND 18 CARS; 176 CONSISTED OF A 3 UNIT LOCOMOTIVE AND 52 CARS. ALL BUT THE LAST CAR OF 87 DERAILED, AND THE NEXT TO THE LAST CAR ON 176 ALSO DERAILED. ON TRAIN 87, THE ASSISTANT ENGINEER WAS KILLED, THE ENGINEER SUSTAINED SERIOUS INJURIES, AND 1 ON BOARD SERVICE CREWMEMBER AND 119 PASSENGERS RECEIVED MINOR INJURIES. THE CREW ON 176 HAD NO INJUIRES. INVESTIGATION REVEALED THAT THE INTERMODAL TRAILER WAS NOT PROPERLY SECURED ON THE FLAT CAR, AND THE SHIPPING COMPANY DID NOT HAVE IN PLACE A COMPREHENSIVE INSPECTION PROGRAM TO ASSURE THAT TRAILERS WERE PROPERLY SECURED ON FLAT CARS.

BRIEF OF ACCIDENT, continued

File No. - 605

05/16/94

SELMA, NC

Time (Lcl) - 0440 EDT

Occurrence #1 - COLLISION WITH OBJECT
Phase - MAINTAINING SPEED

Finding(s)

1. TRAILER - NOT SECURED
 2. TRAILER - STRUCK
 3. CARGO LOADING/UNLOADING - IMPROPERLY INSTALLED - SHIPPER
 4. EQUIPMENT INSPECTION - INADEQUATE - SHIPPER
 5. INADEQUATE INSPECTION - EXECUTIVES AND OFFICIALS
-

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the failure of the CSX Intermodal Corporation loading crew to properly secure the intermodal trailer to the flat car on
CSXT 176 and the failure of the CSX Intermodal Corporation to have in place a comprehensive inspection program.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # NYC94FR010

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 606

05/21/94

BELLS, TN

Time (Lc1) - 1004 CDT

---Basic Information---

Reporting Railroad - CSX	Property Losses	Injuries			
Type of Accident - HIGHWAY CROSSING	Railroad - \$ 1,350,000.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 50,000.00	Employees 0	0	0	3
Method of Operation - TRAFFIC CONTROL	Fire - NO	Passengers 0	0	0	0
TIMETABLE		Motorist 1	0	0	0
		Other 0	0	0	0

CSX - CSX TRANSPORTATION

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - CSX	No. Loco. Units - 3	Front End - 3
Type of Train - FREIGHT	No. Cars/Caboose - 102/0	Rear End - 0
Train ID - EXTRA 8417 EAST	End of Train Monitor - MONITOR	Toxicology Performed - NO
Direction - EAST	Length (Feet) - 6680	Radio Communications
Speed (Est.) - 37	Trailing Tons - 9149	Radio Available - YES
Speed (Auth.) - 49	Loco. Destroy/Derailed - 0/3	Operational - YES
	Cars Destroy/Derailed - 35/36	

CSX - CSX TRANSPORTATION

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - YES
Condition of Light - DAYLIGHT	MEMPHIS, TN	Cars Involved - 3
	Destination	Track Information
Evacuation - YES	NASHVILLE, TN	Type/No. of Tracks - MAIN/1
		Gradient - LEVEL
		Alignment - TANGENT

---Narrative---

CSX FREIGHT TRAIN EXTRA 8417 EAST, TRAVELING 37 MPH ON 49 MPH TRACK, STRUCK A LOADED DUMP TRUCK AT A PRIVATE GRADE CROSSING. THREE LOCOMOTIVES AND 36 CARS WERE DERAILED. THE TRAIN WHISTLE WAS BEING SOUNDED AND THE LOCOMOTIVE HEADLIGHT WAS ILLUMINATED. THE VEHICLE HAD TURNED OFF THE HIGHWAY ONTO THE DIRT CROSSING AND APPROACHED THE MAIN TRACK WITHOUT STOPPING. THE BRAKEMAN, WHO WAS SEATED ON THE LEFT SIDE OF THE LOCOMOTIVE CAB, OBSERVED THE TRUCK ENTER THE CROSSING FROM THE NORTH SIDE. THE ENGINEER COULD NOT SEE THE TRUCK FROM HIS SIDE OF THE CAB. THE BRAKEMAN STATED THAT THE TRUCK DRIVER DID NOT LOOK AT THE TRAIN UNTIL THE LAST SECOND BEFORE IMPACT. THE CROSSING WAS EQUIPPED WITH REFLECTORIZED CROSSBUCK CROSSING SIGNS. THE DRIVER WAS FATALLY INJURED. THREE TANK CARS WERE DERAILED; ONE CONTAINING HAZARDOUS MATERIAL WAS PUNCTURED AND IT'S CONTENTS WERE RELEASED. THE OTHER TWO CONTAINED PETROLEUM PRODUCT. A HALF-MILE RADIUS AREA WAS EVACUATED, AFFECTING 12 PEOPLE.

BRIEF OF ACCIDENT, continued

File No. - 606

05/21/94

BELLS, TN

Time (Lcl) - 1004 CDT

Occurrence #1 - COLLISION WITH OBJECT
Phase - MAINTAINING SPEED

Finding(s)

1. OBJECT ON TRACK - VEHICLE
 2. GRADE CROSSING WARNING DEVICE, PASSIVE - NOT COMPLIED - DRIVER OF VEHICLE
-

Occurrence #2 - TANK CAR PUNCTURED
Phase - STOPPING

Occurrence #3 - HAZARDOUS MATERIALS LEAK/SPILL (FUMES/SMOKE)
Phase - STOPPING

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
failure of the vehicle driver to stop at the grade crossing.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # CHI94FR013

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 607

06/02/94

RATHDRUM, ID

Time (Lcl) - 1006 PDT

---Basic Information---

Reporting Railroad - BN	Property Losses	Injuries			
Type of Accident - DERAILMENT	Railroad - \$ 930,542.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 0.00	Employees	0	0	0
Method of Operation - AUTOMATIC BLOCK	Fire - YES	Passengers	0	0	0
Method of Operation - TRAFFIC CONTROL		Motorist	0	0	0
		Other	0	0	0

BN - BURLINGTON NORTHERN RAILROAD COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - BN	No. Loco. Units - 3	Front End - 2
Type of Train - FREIGHT	No. Cars/Caboose - 75/0	Rear End - 0
Train ID - EXTRA 8053 EAST	End of Train Monitor - MONITOR	Toxicology Performed - YES
Direction - EAST	Length (Feet) - 4595	Radio Communications
Speed (Est.) - 38	Trailing Tons - 6423	Radio Available - YES
Speed (Auth.) - 60	Loco. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - 8/11	

BN - BURLINGTON NORTHERN RAILROAD COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - YES
Condition of Light - DAYLIGHT	SPOKANE, WA	Cars Involved - 5
	Destination	Track Information
Evacuation - NO	WHITEFISH, MT	Type/No. of Tracks - MAIN/1
		Gradient - ASC. 0.40
		Alignment - TANGENT

---Narrative---

BN FREIGHT TRAIN EXTRA 8053 EAST HAD 11 CARS DERAIL WHILE MOVING AT 38 MPH IN 60 MPH TERRITORY. INVESTIGATION REVEALED AN AXLE BEARING HAD OVERHEATED AND BURNED OFF AN AXLE JOURNAL OF THE 31ST CAR OF THE TRAIN 2.7 MILES BEFORE THE ACCIDENT SITE. THE DERAILED WHEEL DESTROYED A WAYSIDE FAILED EQUIPMENT DETECTOR, PROHIBITING IT FROM RADIOING AN ALARM. OPERATING RULES REQUIRE THE CREW TO STOP AND INSPECT THE TRAIN WHEN NO MESSAGE WAS RECEIVED FROM THE WAYSIDE DETECTOR. THE REST OF THE CARS DERAILED WHEN THE DERAILED WHEEL STRUCK A SIDING SWITCH, AND THEN A FIRE ENSUED. EXAMINATION OF THE ROLLER BEARING DISCLOSED THAT THE DEFORMATION OF THE AXLE WAS CONSISTENT WITH A SLOW BURN OFF, BUT THE EXCESSIVE HEAT DAMAGE PREVENTED DETERMINATION OF THE MODE OF THE BEARING FAILURE.

BRIEF OF ACCIDENT, continued

File No. - 607

06/02/94

RATHDRUM, ID

Time (Lcl) - 1006 PDT

Occurrence #1 - TRAIN COMPONENT SYSTEM/FAILURE/MALFUNCTION
Phase - MAINTAINING SPEED

Finding(s)

1. ROLLER BEARING - OVERHEATED
 2. AXLE JOURNAL - BURN-OFF
 3. DEFECT DETECTORS - DAMAGE
-

Occurrence #2 - DERAILMENT, INITIAL
Phase - MAINTAINING SPEED

Finding(s)

4. OPERATING RULES - NOT COMPLIED - ENTIRE TRAIN CREW
-

Occurrence #3 - DERAILMENT, GENERAL
Phase - MAINTAINING SPEED

Occurrence #4 - FIRE
Phase - STOPPING

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
an axle bearing overheated and burned off the axle bearing, and the crew failed to stop and inspect the train when they did not receive a message from the failed equipment detector.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # CHI94FR014

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 608

06/06/94

COMSTOCK, MI

Time (Lcl) - 1219 EDT

---Basic Information---

Reporting Railroad - CR	Property Losses	Injuries			
Type of Accident - HIGHWAY CROSSING	Railroad - \$ 346,500.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 40,000.00	Employees 0	0	0	4
Method of Operation - AUTOMATIC BLOCK TRAFFIC CONTROL	Fire - NO	Passengers 0	0	14	113
		Motorist 1	0	0	0
		Other 0	0	0	0

CR - CONSOLIDATED RAIL CORPORATION

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - ATK	No. Loco. Units - 1	Front End - 1
Type of Train - PASSENGER	No. Cars/Caboose - 3/0	Rear End - 2
Train ID - NO. 364	End of Train Monitor - MARKER	Toxicology Performed - NO
Direction - EAST	Length (Feet) - 200	Radio Communications
Speed (Est.) - 60	Trailing Tons - N/A	Radio Available - YES
Speed (Auth.) - 60	Loco. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - 0/3	

ATK - AMTRAK

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - NO
Condition of Light - DAYLIGHT	CHICAGO, IL	Cars Involved - 0
	Destination	Track Information
	BATTLE CREEK, MI	Type/No. of Tracks - MAIN/1
Evacuation - NO		Gradient - ASC. 0.25
		Alignment - TANGENT

---Narrative---

AMTRAK PASSENGER TRAIN NO. 364, CONSISTING OF 1 LOCOMOTIVE UNIT AND 3 CARS, STRUCK A DUMP TRUCK AT A PRIVATE ROAD CROSSING WHILE MOVING 60 MPH ON 60 MPH TRACK. WITNESSES STATED THAT THE TRUCK, WHICH WAS MOVING DOWN AN INCLINE, STOPPED SHORT OF THE CROSSING, THEN SLOWLY MOVED ON TO THE TRACKS DIRECTLY IN FRONT OF THE TRAIN. THE ENGINEER STATED THAT THE TRUCK DRIVER WAS LOOKING BACK OVER HIS SHOULDER JUST BEFORE THE COLLISION. THE TRUCK DRIVER WAS FATALLY INJURED AND 14 OF 127 PASSENGERS ON THE TRAIN SUSTAINED MINOR INJURIES. THE LOCOMOTIVE DID NOT DERAIL, BUT THE 3 CARS DID. THERE WERE NO GRADE CROSSING WARNING DEVICES OF ANY KIND AT THE CROSSING, AND THEY ARE NOT REQUIRED FOR PRIVATE CROSSINGS. THE TRUCK WAS LEAVING A CONCRETE FABRICATING PLANT OVER THE CROSSING WHICH WAS ON THE ONLY ACCESS ROAD TO THE PLANT.

BRIEF OF ACCIDENT, continued

File No. - 608

06/06/94

COMSTOCK, MI

Time (Lcl) - 1219 EDT

Occurrence #1 - COLLISION WITH OBJECT
Phase - MAINTAINING SPEED

Finding(s)

1. HIGHWAY VEHICLE - ON TRACK
 2. TRAIN OPERATION - NOT OBSERVED - DRIVER OF VEHICLE
 3. INATTENTIVE - DRIVER OF VEHICLE
-

Occurrence #2 - DERAILMENT
Phase - STOPPING

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the failure of the truck driver to stop for the train, due to inattentiveness.

NATIONAL TRANSPORTATION SAFETY BOARD
 WASHINGTON, D.C. 20594

NTSB # CHI94FR015

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 610

06/11/94

EASTLAND, TX

Time (Lcl) - 1300 CDT

---Basic Information---

Reporting Railroad - UP	Property Losses	Injuries			
Type of Accident - DERAILMENT	Railroad - \$ 1,320,025.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 20,000.00	Employees 0	0	0	2
Method of Operation - TRAFFIC CONTROL	Fire - NO	Passengers 0	0	0	0
TIMETABLE		Motorist 0	0	0	0
		Other 0	0	1	50

UP - UNION PACIFIC RAILROAD COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - UP	No. Loco. Units - 4	Front End - 2
Type of Train - FREIGHT	No. Cars/Caboose - 124/0	Rear End - 0
Train ID - EXTRA 6187 WEST	End of Train Monitor - MONITOR	Toxicology Performed - YES
Direction - WEST	Length (Feet) - 7496	Radio Communications
Speed (Est.) - 45	Trailing Tons - 9269	Radio Available - YES
Speed (Auth.) - 50	Loco. Destroy/Derailed - 0/3	Operational - YES
	Cars Destroy/Derailed - 15/31	

UP - UNION PACIFIC RAILROAD COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - RAIN	Last Departure Point	Involved - YES
Condition of Light - DAYLIGHT	FT. WORTH, TX	Cars Involved - 2
	Destination	Track Information
	BIG SPRING, TX	Type/No. of Tracks - MAIN/1
Evacuation - YES		Gradient - ASC. 0.09
		Alignment - CURVE 2 D 9 M

---Narrative---

UP FREIGHT TRAIN EXTRA 6187 WEST HAD 3 LOCOMOTIVE UNITS AND THE HEAD 31 CARS DERAIL WHILE MOVING 45 MPH ON 50 MPH TRACK THROUGH A 2 DEGREE 9 MINUTE CURVE. INVESTIGATION REVEALED THAT THE RAILS HAD SPREAD APART AND THE LOCOMOTIVE UNITS HAD DROPPED BETWEEN THE RAILS. TRACK MEASUREMENTS IN THE DERAILMENT AREA INDICATED NUMEROUS TRACK DEFECTS INCLUDING WIDE GAUGE, IMPROPER RAIL JOINT SUPPORT, IMPROPER RAIL ANCHORAGE, AND IMPROPER CROSSTIE PLACEMENT. ONE OF THE DERAILED CARS WAS A TANK CAR CONTAINING HYDROCHLORIC ACID. THE CAR WAS PUNCTURED AND RELEASED 18,000 GALLONS OF ACID. 50 PEOPLE WERE EVACUATED FROM THE AREA FOR ABOUT 5 HOURS.

BRIEF OF ACCIDENT, continued

File No. - 610

06/11/94

EASTLAND, TX

Time (Lcl) - 1300 CDT

Occurrence #1 - TRACK COMPONENT SYSTEM/FAILURE/MALFUNCTION
Phase - ACCELERATING

Finding(s)

1. RAIL ANCHORAGES - INADEQUATE
 2. TRACK GAGE - EXCESSIVE
 3. CROSSTIES - IRREGULAR
 4. TRACK INSPECTION - INADEQUATE - MAINTENANCE OF WAY INSPECTOR
 5. INADEQUATE SUPERVISION - COMPANY OPERATOR/MGMT
-

Occurrence #2 - DERAILMENT
Phase - ACCELERATING

Occurrence #3 - TANK CAR PUNCTURED
Phase - STOPPING

Occurrence #4 - HAZARDOUS MATERIALS LEAK/SPILL (FUMES/SMOKE)
Phase - STOPPING

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the rails spread under the moving train due to improper track maintenance.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # LA 34FR009

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 611

06/17/94

BOVINA, TX

Time (Lcl) - 0520 CST

---Basic Information---

Reporting Railroad - ATSF	Property Losses	Injuries			
Type of Accident - DERAILMENT	Railroad - \$ 1,593,500.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 0.00	0	0	0	3
Method of Operation - TRAFFIC CONTROL	Fire - NO	0	0	0	0
TIMETABLE		0	0	0	0

ATSF - ATCHISON, TOPEKA AND SANTA FE RAILWAY COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - ATSF	No. Loco. Units - 4	Front End - 3
Type of Train - FREIGHT	No. Cars/Caboose - 53/0	Rear End - 0
Train ID - H-RISRI-14	End of Train Monitor - MONITOR	Toxicology Performed - YES
Direction - EAST	Length (Feet) - 3751	Radio Communications
Speed (Est.) - 55	Trailing Tons - 5655	Radio Available - YES
Speed (Auth.) - 55	Loco. Destroy/Derailed - 0/2	Operational - YES
	Cars Destroy/Derailed - 20/23	

ATSF - ATCHISON, TOPEKA AND SANTA FE RAILWAY COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - NO
Condition of Light - DUSK	CLOVIS, MN	Cars Involved - 0
	Destination	Track Information
Evacuation - NO	AMARILLO, TX	Type/No. of Tracks - MAIN/2
		Gradient - ASC. 0.45
		Alignment - TANGENT

---Narrative---

ATSF FREIGHT TRAIN EXTRA 903 EAST HAD 2 LOCOMOTIVE UNITS AND 23 CARS DERAIL WHILE MOVING 35 MPH ON 55 MPH TRACK. 17 INCHES OF RAIL HAD BROKEN OFF THE HEAD SECTION OF A RAIL AT THE POINT OF DERAILMENT. THERE WAS EXCESSIVE HEAD BATTER TO BOTH ENDS OF THE RAIL SECTIONS WHERE THE RAIL HEAD HAD BROKEN. A CRACK FROM AN ELONGATED BOLT HOLE UNDER THE BROKEN HEAD SECTION RAN OUTWARD IN BOTH DIRECTIONS, THEN UP THROUGH THE HEAD. A RAIL DETECTOR CAR HAD PROCEEDED THROUGH THIS AREA 3 DAYS BEFORE THE ACCIDENT, BUT THE CRACK WAS NOT DETECTED. A TRACK SUPERVISOR HAD INSPECTED THE TRACK THAT DAY, BUT COULD NOT OBSERVE THE CRACK UNDER THE RAIL HEAD.

BRIEF OF ACCIDENT, continued

File No. - 611

06/17/94

BOVINA, TX

Time (Lcl) - 0520 CST

**Occurrence #1 - DERAILMENT
Phase - MAINTAINING SPEED**

Finding(s)

- 1. BOLT HOLE - ELONGATED**
 - 2. RAIL - CRACKED**
 - 3. RAIL - BROKEN**
-

---Probable Cause---

**The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
a rail broke at a fatigue fracture which had originated at a bolt hole and propagated along the head of the rail.**

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # LAX94FR010

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 612

06/28/94

SHERIDAN, WY

Time (Lcl) - 1755 MDT

---Basic Information---

Reporting Railroad - BN	Property Losses	Injuries			
Type of Accident - DERAILMENT	Railroad - \$ 924,300.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 0.00	Employees 0	0	0	4
Method of Operation - TRAFFIC CONTROL	Fire - NO	Passengers 0	0	0	0
TIMETABLE		Motorist 0	0	0	0
		Other 0	0	0	0

BN - BURLINGTON NORTHERN RAILROAD COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - BN	No. Loco. Units - 7	Front End - 2
Type of Train - FREIGHT	No. Cars/Caboose - 114/1	Rear End - 2
Train ID - EXTRA 5595 WEST	End of Train Monitor - NO	Toxicology Performed - YES
Direction - WEST	Length (Feet) - 6370	Radio Communications
Speed (Est.) - 45	Trailing Tons - 15502	Radio Available - YES
Speed (Auth.) - 45	Loco. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - 12/31	

BN - BURLINGTON NORTHERN RAILROAD COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - NO
Condition of Light - DAYLIGHT	SHERIDAN, WY	Cars Involved - 0
	Destination	Track Information
Evacuation - NO	GILLETTE, WY	Type/No. of Tracks - MAIN/1
		Gradient - DES. 0.30
		Alignment - TANGENT

---Narrative---

BN FREIGHT TRAIN EXTRA 5595 WEST HAD 31 CARS DERAIL WHILE MOVING 45 MPH ON 45 MPH TRACK. INVESTIGATION REVEALED A RAIL HAD BROKEN UNDER THE LOADING FORCES OF THE TRAIN. A RAIL DETECTOR CAR HAD BEEN RUN OVER THE TRACK THE MONTH BEFORE AND THE TRACK HAD BEEN VISUALLY INSPECTED THE DAY BEFORE THE ACCIDENT. NO RAIL DEFECTS WERE DETECTED AT EITHER INSPECTION.

BRIEF OF ACCIDENT, continued

File No. - 612

06/28/94

SHERIDAN, WY

Time (Lc1) - 1755 MDT

Occurrence #1 - DERAILMENT
Phase - MAINTAINING SPEED

Finding(s)

1. RAIL, CONTINUOUSLY WELDED - BROKEN

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
a rail broke under the forces of the train for unknown reasons.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # LAX94FR011

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 613

07/05/94

ESSEX, MT

Time (Lcl) - 1649 MDT

---Basic Information---

Reporting Railroad - BN	Property Losses	Injuries			
Type of Accident - EMPLOYEE FATALITY	Railroad - \$ 1,500.00	Fatal	Serious	Minor	None
Operating Phase - SWITCHING	Non-Railroad - \$ 0.00	Employees 1	0	0	2
Method of Operation - TRAFFIC CONTROL	Fire - NO	Passengers 0	0	0	0
TIMETABLE		Motorist 0	0	0	0
		Other 0	0	0	0

BN - BURLINGTON NORTHERN RAILROAD COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - BN	No. Loco. Units - 2	Front End - 3
Type of Train - CUT OF CARS	No. Cars/Caboose - 14/0	Rear End - 0
Train ID - EXTRA 6817 WEST	End of Train Monitor - NO	Toxicology Performed - YES
Direction - WEST	Length (Feet) - 1800	Radio Communications
Speed (Est.) - 12	Trailing Tons - 444	Radio Available - YES
Speed (Auth.) - 10	Loco. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - 0/2	

BN - BURLINGTON NORTHERN RAILROAD COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - NO
Condition of Light - DAYLIGHT	ESSEX, MT	Cars Involved - 0
	Destination	Track Information
	ESSEX, MT	Type/No. of Tracks - INDUSTRIAL/2
Evacuation - NO		Gradient - DES. 2.51
		Alignment - CURVE 10 D 0 M

---Narrative---

A BN BRAKEMAN WAS FATALLY INJURED WHILE SWITCHING CARS AT A GRAVEL PIT INDUSTRIAL SIDING. THE CREW HAD DROPPED 14 EMPTY CARS FROM THE MAIN TRACK ONTO THE GRAVEL PIT TRACK. THE CARS WERE ROLLING FREELY ON THE DESCENDING GRADE, WITH THE BRAKEMAN STANDING ON THE HANDBRAKE PLATFORM ON THE END OF THE THIRD CAR. HE HAD INTENDED TO SET THE HANDBRAKES ON SOME OF THE CARS TO CONTROL THE SPEED OF THE CUT OF CARS INTO THE SIDING. THE CARS DID NOT SLOW DOWN AND CONTINUED ROLLING TO THE END OF THE TRACK. THEY RAN OFF THE END OF THE TRACK AND STRUCK A LARGE PILE OF GRAVEL WHILE DERAILING. THE 2 END CARS JACKKNIFED VERTICALLY TOWARD THE THIRD CAR AND CRUSHED THE BRAKEMAN BETWEEN THE SECOND AND THIRD CARS. THE DAY AFTER THE ACCIDENT, THE BN ISSUED A NOTICE PROHIBITING THE DROPPING OF CARS AT THIS INDUSTRY.

BRIEF OF ACCIDENT, continued

File No. - 613

07/05/94

ESSEX, MT

Time (Lcl) - 1649 MDT

Occurrence #1 - FATALITY, EMPLOYEE
Phase - DROPPING CAR(S)

Finding(s)

1. CUT OF CARS - OVERSPEED
 2. TRAIN HANDLING - INADEQUATE - ENTIRE TRAIN CREW
-

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the poor decision by the train crew in attempting to control a cut of 14 cars with one handbrake on a descending grade.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # DCA94MR006A

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 614

07/25/94

MARATHON, TX

Time (Lcl) - 0905 CDT

---Basic Information---

Reporting Railroad - SP	Property Losses	Injuries			
Type of Accident - COLLISION, HEAD-ON	Railroad - \$ 8,000,000.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 0.00	Employees 2	0	0	0
Method of Operation - AUTOMATIC BLOCK	Fire - YES	Passengers 0	0	0	0
TIMETABLE		Motorist 0	0	0	0
		Other 2	0	0	0

SP - SOUTHERN PACIFIC TRANSPORTATION COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - SP	No. Loco. Units - 5	Front End - 2
Type of Train - FREIGHT	No. Cars/Caboose - 42/0	Rear End - 0
Train ID - EXTRA 9719 EAST	End of Train Monitor - MONITOR	Toxicology Performed - YES
Direction - EAST	Length (Feet) - 6812	Radio Communications
Speed (Est.) - 39	Trailing Tons - 5969	Radio Available - YES
Speed (Auth.) - 0	Loco. Destroy/Derailed - 5/5	Operational - YES
	Cars Destroy/Derailed - 3/3	

SP - SOUTHERN PACIFIC TRANSPORTATION COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - NO
Condition of Light - DAYLIGHT	EL PASO, TX	Cars Involved - 0
	Destination	Track Information
Evacuation - NO	SANDERSON, TX	Type/No. of Tracks - MAIN/1
		Gradient - DES. 1.00
		Alignment - CURVE 4 D 3 M

---Narrative---

SP FREIGHT TRAIN EXTRA 9719 EAST, MOVING 39 MPH, COLLIDED HEAD ON WITH SP FREIGHT TRAIN EXTRA 9713 WEST, MOVING 25 MPH. INVESTIGATION REVEALED THAT 9719 HAD PASSED AN ADVANCE APPROACH SIGNAL AT 64 MPH WITH DYNAMIC BRAKES APPLIED. ONE HALF MILE PAST THE APPROACH SIGNAL, 2 AUTOMATIC BRAKE APPLICATIONS WERE MADE BUT THE BRAKES WERE RELEASED ABOUT ONE MILE BEFORE REACHING THE STOP SIGNAL, WHICH 9719 WENT PAST AT 43 MPH. THE BRAKES WERE APPLIED AGAIN AS THE STOP SIGNAL WAS PASSED AND THE TRAIN HAD SLOWED TO 39 MPH WHEN IT STRUCK 9713. THE CREW OF 9719 HAD BEEN CALLED FOR DUTY SHORT RESTED DUE TO CHANGES IN THE CREW LINEUP THAT RESULTED IN THEM BEING CALLED 4 TURNS EARLY. IT WAS DETERMINED THAT THE CONDUCTOR HAD 4.5 HOURS OF SLEEP IN THE PREVIOUS 51.5 HOURS AND THAT THE ENGINEER PROBABLY HAD 4.5 HOURS OF SLEEP IN THE PREVIOUS 35 HOURS. THE INVESTIGATION DETERMINED THAT THE CREW OF 9719 PROBABLY SUFFERED FROM REDUCED ALERTNESS CONSISTENT WITH FALLING ASLEEP AND WERE NOT AWARE OF THE SIGNAL INDICATIONS.

BRIEF OF ACCIDENT, continued

File No. - 614

07/25/94

MARATHON, TX

Time (Lcl) - 0905 CDT

Occurrence #1 - COLLISION, HEAD-ON
Phase - SLOWING

Finding(s)

1. SIGNAL INDICATIONS - NOT COMPLIED - ENTIRE TRAIN CREW
 2. FATIGUE (lack of sleep) - ENTIRE TRAIN CREW
 3. INATTENTIVE - ENTIRE TRAIN CREW
-

Occurrence #2 - DERAILMENT
Phase - STOPPING

Occurrence #3 - FIRE
Phase - STOPPING

Occurrence #4 - FATALITY, EMPLOYEE
Phase - STOPPING

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was: the failure of the crew of Extra 9719 East to control their train and observe signal indications due to reduced alertness consistent with falling asleep, and the failure of SP to provide accurate train lineup information for crews reporting for duty.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # DCA94MP9:68

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 614

07/25/94

MARATHON, TX

Time (Lcl) - 0905 CDT

---Basic Information---

Reporting Railroad - SP	Property Losses	Injuries			
Type of Accident - COLLISION, HEAD-ON	Railroad - \$ 4,000,000.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 0.00	Employees	0	0	0
Method of Operation - AUTOMATIC BLOCK	Fire - YES	Passengers	0	0	0
TIMETABLE		Motorist	0	0	0
		Other	2	0	0

SP - SOUTHERN PACIFIC TRANSPORTATION COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - SP	No. Loco. Units - 7	Front End - 2
Type of Train - FREIGHT	No. Cars/Caboose - 25/0	Rear End - 0
Train ID - EXTRA 9713 WEST	End of Train Monitor - MONITOR	Toxicology Performed - YES
Direction - WEST	Length (Feet) - 5950	Radio Communications
Speed (Est.) - 25	Trailing Tons - 5633	Radio Available - YES
Speed (Auth.) - 25	Loco. Destroy/Derailed - 4/4	Operational - YES
	Cars Destroy/Derailed - N/A	

SP - SOUTHERN PACIFIC TRANSPORTATION COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - NO
Condition of Light - DAYLIGHT	SANDERSON, TX	Cars Involved - 0
	Destination	Track Information
	EL PASO, TX	Type/No. of Tracks - MAIN/1
Evacuation - NO		Gradient - ASC. 1.00
		Alignment - CURVE 4 D 3 M

---Narrative---

SP FREIGHT TRAIN EXTRA 9719 EAST, MOVING 39 MPH, COLLIDED HEAD ON WITH SP FREIGHT TRAIN EXTRA 9713 WEST, MOVING 25 MPH. INVESTIGATION REVEALED THAT 9719 HAD PASSED AN ADVANCE APPROACH SIGNAL AT 64 MPH WITH DYNAMIC BRAKES APPLIED. ONE HALF MILE PAST THE APPROACH SIGNAL, 2 AUTOMATIC BRAKE APPLICATIONS WERE MADE BUT THE BRAKES WERE RELEASED ABOUT ONE MILE BEFORE REACHING THE STOP SIGNAL, WHICH 9719 WENT PAST AT 43 MPH. THE BRAKES WERE APPLIED AGAIN AS THE STOP SIGNAL WAS PASSED AND THE TRAIN HAD SLOWED TO 39 MPH WHEN IT STRUCK 9713. THE CREW OF 9719 HAD BEEN CALLED FOR DUTY SHORT RESTED DUE TO CHANGES IN THE CREW LINEUP THAT RESULTED IN THEM BEING CALLED 4 TURNS EARLY. IT WAS DETERMINED THAT THE CONDUCTOR HAD 4.5 HOURS OF SLEEP IN THE PREVIOUS 51.5 HOURS AND THAT THE ENGINEER PROBABLY HAD 4.5 HOURS OF SLEEP IN THE PREVIOUS 35 HOURS. THE INVESTIGATION DETERMINED THAT THE CREW OF 9719 PROBABLY SUFFERED FROM REDUCED ALERTNESS CONSISTENT WITH FALLING ASLEEP AND WERE NOT AWARE OF THE SIGNAL INDICATIONS.

BRIEF OF ACCIDENT, continued

File No. - 614

07/25/94

MARATHON, TX

Time (Lcl) - 0905 CDT

Occurrence #1 - COLLISION, HEAD-ON
Phase - MAINTAINING SPEED

Finding(s)

1. AUTOMATIC BLOCK SIGNAL - NOT COMPLIED - ENGINEER OF OTHER TRAIN
 2. FATIGUE (lack of sleep) - ENGINEER OF OTHER TRAIN
 3. INATTENTIVE - ENGINEER OF OTHER TRAIN
-

Occurrence #2 - DERAILMENT
Phase - STOPPING

Occurrence #3 - FIRE
Phase - STOPPING

Occurrence #4 - FATALITY, EMPLOYEE
Phase - STOPPING

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the failure of the crew of Extra 9719 East to control their train and observe signal indications due to reduced alertness, and the failure of SP to provide accurate train lineup information for crews reporting for duty.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # CHI94FR016

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 615

07/26/94

PEKIN, IL

Time (Lcl) - 0940 CDT

---Basic Information---

Reporting Railroad - CNW	Property Losses	Injuries			
Type of Accident - DERAILMENT	Railroad - \$ 243,025.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 10,000.00	Employees 0	0	1	1
Method of Operation - TIMETABLE	Fire - NO	Passengers 0	0	0	0
RADIO		Motorist 0	0	0	0
		Other 0	0	0	0

CNW - CHICAGO AND NORTH WESTERN TRANSPORTATION COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - CNW	No. Loco. Units - 2	Front End - 2
Type of Train - FREIGHT	No. Cars/Caboose - 92/0	Rear End - 0
Train ID - EXTRA 6830 NORTH	End of Train Monitor - MONITGR	Toxicology Performed - NO
Direction - NORTH	Length (Feet) - 5385	Radio Communications
Speed (Est.) - 20	Trailing Tons - 4902	Radio Available - YES
Speed (Auth.) - 30	Loco. Destroy/Derailed - 0/2	Operational - YES
	Cars Destroy/Derailed - 0/5	

CNW - CHICAGO AND NORTH WESTERN TRANSPORTATION COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - NO
Condition of Light - DAYLIGHT	SOUTH PEKIN, IL	Cars Involved - 0
	Destination	Track Information
Evacuation - NO	CHICAGO, IL	Type/No. of Tracks - MAIN/1
		Gradient - LEVEL
		Alignment - TANGENT

---Narrative---

CNW FREIGHT TRAIN EXTRA 6830 NORTH HAD 2 LOCOMOTIVE UNITS AND 5 CARS DERAIL WHILE MOVING 20 MPH ON 30 MPH TRACK. THE DERAILMENT OCCURRED AT A RAILROAD BRIDGE THAT HAD BEEN STRUCK BY A TRUCK TRAVELING UNDERNEATH IT AND KNOCKED OUT OF ALIGNMENT. THE TRUCK WAS EQUIPPED WITH A HYDRAULIC LOADING BOOM THAT THE DRIVER HAD NOT LOWERED AND SECURED AFTER LOADING HIS TRUCK WITH CEMENT BLOCKS. AS THE TRUCK PASSED UNDER THE BRIDGE, THE BOOM STRUCK A GIRDER, KNOCKING THE BRIDGE AND THE TRACK STRUCTURE OUT OF ALIGNMENT. ABOUT 10 MINUTES LATER, THE TRAIN PROCEEDED ONTO THE BRIDGE AND DERAILED AT THE MISALIGNED SECTION OF TRACK. THE CONDUCTOR JUMPED FROM THE TRAIN JUST BEFORE THE DERAILMENT AND SUSTAINED MINOR INJURIES. THE ENGINEER STAYED ON THE TRAIN AND WAS NOT INJURED.

BRIEF OF ACCIDENT, continued

File No. - 615

07/26/94

PEKIN, IL

Time (Lcl) - 0940 CDT

Occurrence #1 - TRACK COMPONENT SYSTEM/FAILURE/MALFUNCTION
Phase - MAINTAINING SPEED

Finding(s)

1. OPEN DECK TRESTLE - STRUCK
 2. VEHICLE HANDLING - IMPROPER - DRIVER OF VEHICLE
 3. INATTENTIVE - DRIVER OF VEHICLE
 4. ALIGNMENT - IRREGULAR
-

Occurrence #2 - DERAILMENT, GENERAL
Phase - DECELERATING

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the failure of the truckdriver to lower the truck boom before it struck the railroad bridge, causing a misaligned track structure.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # LAX94FR012A

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 616

07/27/94

TEHACHAPI, CA

Time (Lcl) - 2155 PDT

---Basic Information---

Reporting Railroad - SP	Property Losses			Injuries			
Type of Accident - COLLISION, SIDE	Railroad - \$ 313,000.00			Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 0.00			Employees	0	0	0
Method of Operation - TRAFFIC CONTROL				Passengers	0	0	0
TIMETABLE	Fire - NO			Motorist	0	0	0
				Other	0	0	0

SP - SOUTHERN PACIFIC TRANSPORTATION COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - ATSF	No. Loco. Units - 5	Front End - 2
Type of Train - FREIGHT	No. Cars/Caboose - 58/0	Rear End - 0
Train ID - EXTRA 5021 EAST	End of Train Monitor - MONITOR	Toxicology Performed - YES
Direction - EAST	Length (Feet) - 5417	Radio Communications
Speed (Est.) - 20	Trailing Tons - 3753	Radio Available - YES
Speed (Auth.) - 0	Loco. Destroy/Derailed - 0/4	Operational - YES
	Cars Destroy/Derailed - N/A	

ATSF - ATCHISON, TOPEKA AND SANTA FE RAILWAY COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - YES
Condition of Light - DARK	BAKERSFIELD, CA	Cars Involved - 1
	Destination:	Track Information
	BARSTOW, CA	Type/No. of Tracks - MAIN/2
Evacuation - NO		Gradient - ASC. 2.00
		Alignment - TANGENT

---Narrative---

ATSF FREIGHT TRAIN EXTRA 5021 EAST MADE AN UNAUTHORIZED EXIT FROM A SIDING AND COLLIDED WITH THE SIDE OF ATSF FREIGHT TRAIN EXTRA 5131 WEST. FOUR LOCOMOTIVE UNITS AND 2 CARS IN THE 2 TRAINS WERE DERAILED. THE ENGINEER AND CONDUCTOR OF 5021 EACH STATED THAT THEY DID NOT REMEMBER THE SIGNAL INDICATIONS FOR SEVERAL MILES PRIOR TO THE COLLISION. THEY WERE UNAWARE THAT THEIR TRAIN WAS MOVING 20 MPH ON 10 MPH TRACK, AND WERE UNAWARE THAT THEIR TRAIN HAD ENTERED A SIDING AND WAS ABOUT TO EXIT THE SIDING BACK ONTO THE MAIN TRACK INTO THE SIDE OF TRAIN 5131. THE CONDUCTOR STATED THAT HE FELT DAZED DURING THIS TIME PERIOD. TOXICOLOGICAL TESTING OF THE ENGINEER OF 5021 INDICATED THE PRESENCE IN URINE OF MORPHINE AT 5302 NG/ML AND CODEINE AT 267 NG/ML. THE CONDUCTOR'S TESTING INDICATED THE PRESENCE IN URINE OF METHAMPHETAMINE AT 1201 NG/ML AND AMPHETAMINE AT 673 NG/ML.

BRIEF OF ACCIDENT, continued

File No. - 616

07/27/94

TEHACHAPI, CA

Time (Lcl) - 2155 PDT

Occurrence #1 - COLLISION, SIDE
Phase - MAINTAINING SPEED

Finding(s)

1. AUTOMATIC BLOCK SIGNAL - NOT OBSERVED - ENTIRE TRAIN CREW
 2. SPEED - UNCONTROLLED - ENTIRE TRAIN CREW
 3. PHYSICAL IMPAIRMENT (drugs) - ENTIRE TRAIN CREW
-

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the failure of the crew of Extra 5021 East to observe signal indications and control the speed of their train due to their drug impairment.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # LAX94FR012B

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 616

07/27/94

TEHACHAPI, CA

Time (Lcl) - 2155 PDT

---Basic Information---

Reporting Railroad - SP	Property Losses	Injuries			
Type of Accident - COLLISION, SIDE	Railroad - \$ 0.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 0.00	Employees 0	0	0	2
Method of Operation - TRAFFIC CONTROL	Fire - NO	Passengers 0	0	0	0
TIMETABLE		Motorist 0	0	0	0
		Other 0	0	0	0

SP - SOUTHERN PACIFIC TRANSPORTATION COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - ATSF	No. Loco. Units - 5	Front End - 2
Type of Train - FREIGHT	No. Cars/Caboose - 62/0	Rear End - 0
Train ID - EXTRA 5131 WEST	End of Train Monitor - MONITOR	Toxicology Performed - NO
Direction - WEST	Length (Feet) - 4094	Radio Communications
Speed (Est.) - 40	Trailing Tons - 5160	Radio Available - YES
Speed (Auth.) - 40	Loco. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - 0/2	

ATSF - ATCHISON, TOPEKA AND SANTA FE RAILWAY COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - NO
Condition of Light - DARK	BARSTOW, CA	Cars Involved - 0
	Destination	Track Information
Evacuation - NO	BAKERSFIELD, CA	Type/No. of Tracks - MAIN/1
		Gradient - DES. 2.00
		Alignment - TANGENT

---Narrative---

ATSF FREIGHT TRAIN EXTRA 5021 EAST MADE AN UNAUTHORIZED EXIT FROM A SIDING AND COLLIDED WITH THE SIDE OF ATSF FREIGHT TRAIN EXTRA 5131 WEST. FOUR LOCOMOTIVE UNITS AND 2 CARS IN THE 2 TRAINS WERE DERAILED. THE ENGINEER AND CONDUCTOR OF 5021 EACH STATED THAT THEY DID NOT REMEMBER THE SIGNAL INDICATIONS FOR SEVERAL MILES PRIOR TO THE COLLISION. THEY WERE UNAWARE THAT THEIR TRAIN WAS MOVING 20 MPH ON 10 MPH TRACK, AND WERE UNAWARE THAT THEIR TRAIN HAD ENTERED A SIDING AND WAS ABOUT TO EXIT THE SIDING BACK ONTO THE MAIN TRACK INTO THE SIDE OF TRAIN 5131. THE CONDUCTOR STATED THAT HE FELT DAZED DURING THIS TIME PERIOD. TOXICOLOGICAL TESTING OF THE ENGINEER OF 5021 INDICATED THE PRESENCE IN URINE OF MORPHINE AT 5302 NG/ML AND CODEINE AT 267 NG/ML. THE CONDUCTOR'S TESTING INDICATED THE PRESENCE IN URINE OF METHAMPHETAMINE AT 1201 NG/ML AND AMPHETAMINE AT 673 NG/ML.

BRIEF OF ACCIDENT, continued

File No. - 616

07/27/94

TEHACHAPI, CA

Time (Lcl) - 2155 PDT

Occurrence #1 - COLLISION, SIDE
Phase - MAINTAINING SPEED

Finding(s)

1. AUTOMATIC BLOCK SIGNAL - NOT OBSERVED - CREW MEMBER OF OTHER TRAIN
 2. AUTOMATIC BLOCK SIGNAL - NOT OBSERVED - CREW MEMBER OF OTHER TRAIN
 3. PHYSICAL IMPAIRMENT (drugs) - CREW MEMBER OF OTHER TRAIN
-

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the failure of the crew of Extra 5021 East to observe signal indications and control the speed of their train due to their drug impairment.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # LAX94FR013A

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 618

08/04/94

LENWOOD, CA

Time (Lcl) - 0940 PDT

---Basic Information---

Reporting Railroad - ATSF	Property Losses	Injuries			
Type of Accident - COLLISION, REAR-END	Railroad - \$ 9,000.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 0.00	Employees 0	0	0	3
Method of Operation - TRAFFIC CONTROL	Fire - NO	Passengers 0	0	0	0
TIMETABLE		Motorist 0	0	0	0
		Other 0	0	0	2

ATSF - ATCHISON, TOPEKA AND SANTA FE RAILWAY COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - ATSF	No. Loco. Units - 4	Front End - 3
Type of Train - FREIGHT	No. Cars/Caboose - 54/0	Rear End - 0
Train ID - EXTRA 564 EAST	End of Train Monitor - MONITOR	Toxicology Performed - YES
Direction - EAST	Length (Feet) - 5140	Radio Communications
Speed (Est.) - 21	Trailing Tons - 4145	Radio Available - YES
Speed (Auth.) - 0	Loco. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - N/A	

ATSF - ATCHISON, TOPEKA AND SANTA FE RAILWAY COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - NO
Condition of Light - DAYLIGHT	LOS ANGELES, CA	Cars Involved - 0
	Destination	Track Information
Evacuation - NO	BARSTOW, CA	Type/No. of Tracks - MAIN/2
		Gradient - DES. 0.74
		Alignment - CURVE 1 D 30 M

---Narrative---

ATSF FREIGHT TRAIN EXTRA 564 EAST, MOVING 21 MPH WHEN IT SHOULD HAVE BEEN STOPPED, COLLIDED WITH THE REAR END OF STANDING UP FREIGHT TRAIN EXTRA 6327 EAST ON ATSF TRACKS. THE CREW OF 564 HAD PASSED 2 YELLOW APPROACH SIGNALS AND A RED STOP SIGNAL WITHOUT SLOWING OR STOPPING THE TRAIN. AT THE RED SIGNAL, THE ENGINEER REALIZED HE WAS GOING TOO FAST TO STOP BEFORE PASSING THE SIGNAL AND RATHER THAN APPLY THE BRAKES IN EMERGENCY, HE OPTED TO MAKE A NORMAL STOP, TAKING THE TRAIN PAST THE SIGNAL. AS 564 CAME AROUND A CURVE, THE ENGINEER SAW THE REAR OF 6327 AND APPLIED THE BRAKES IN EMERGENCY, BUT THE TRAIN COULD NOT STOP BEFORE STRIKING 6327. THE ENGINEER STATED HE WAS TALKING TO THE OTHER CREWMEMBERS AS THEY PASSED THE SIGNALS AND THEY HAD QUIT PAYING ATTENTION.

BRIEF OF ACCIDENT, continued

File No. - 618

08/04/94

LENWOOD, CA

Time (Lcl) - 0940 PDT

Occurrence #1 - COLLISION, REAR
Phase - SLOWING

Finding(s)

1. TRAIN - OVERSPEED
 2. SPEED - EXCESSIVE - ROAD FREIGHT ENGINEER/MOTORMAN (through freight)
 3. SIGNAL INDICATION - DISREGARDED - ENTIRE TRAIN CREW
 4. OPERATING RULES - NOT COMPIED - ENTIRE TRAIN CREW
 5. INATTENTIVE - ENTIRE TRAIN CREW
-

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the failure of the crew of Extra 564 East to observe and comply with signal indications due to their inattentiveness.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # LAX94FR013B

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 618

08/04/94

LENWOOD, CA

Time (Lcl) - 0940 PDT

---Basic Information---

Reporting Railroad - ATSF	Property Losses			Injuries			
Type of Accident - COLLISION, REAR-END	Railroad - \$ 119,000.00	Employees	Fatal	Serious	Minor	None	
Operating Phase - STANDING	Non-Railroad - \$ 0.00	Passengers	0	0	0	0	2
Method of Operation - TRAFFIC CONTROL	Fire - NO	Motorist	0	0	0	0	0
TIMETABLE		Other	0	0	0	0	3

ATSF - ATCHISON, TOPEKA AND SANTA FE RAILWAY COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - UP	No. Loco. Units - 3	Front End - 2
Type of Train - FREIGHT	No. Cars/Caboose - 93/0	Rear End - 0
Train ID - EXTRA 6327 EAST	End of Train Monitor - MONITOR	Toxicology Performed - NO
Direction - EAST	Length (Feet) - 5576	Radio Communications
Speed (Est.) - 0	Trailing Tons - 3453	Radio Available - YES
Speed (Auth.) - 0	Loco. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - 0/5	

UP - UNION PACIFIC RAILROAD COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - NO
Condition of Light - DAYLIGHT	LOS ANGELES, CA	Cars Involved - 0
	Destination	Track Information
Evacuation - NO	YERMO, CA	Type/No. of Tracks - MAIN/2
		Gradient - DES. 0.74
		Alignment - CURVE 1 D 30 M

---Narrative---

ATSF FREIGHT TRAIN EXTRA 564 EAST, MOVING 21 MPH WHEN IT SHOULD HAVE BEEN STOPPED, COLLIDED WITH THE REAR END OF STANDING UP FREIGHT TRAIN EXTRA 6327 EAST ON ATSF TRACKS. THE CREW OF 564 HAD PASSED 2 YELLOW APPROACH SIGNALS AND A RED STOP SIGNAL WITHOUT SLOWING OR STOPPING THE TRAIN. AT THE RED SIGNAL, THE ENGINEER REALIZED HE WAS GOING TOO FAST TO STOP BEFORE PASSING THE SIGNAL AND RATHER THAN APPLY THE BRAKES IN EMERGENCY, HE OPTED TO MAKE A NORMAL STOP, TAKING THE TRAIN PAST THE SIGNAL. AS 564 CAME AROUND A CURVE, THE ENGINEER SAW THE REAR OF 6327 AND APPLIED THE BRAKES IN EMERGENCY, BUT THE TRAIN COULD NOT STOP BEFORE STRIKING 6327. THE ENGINEER STATED HE WAS TALKING TO THE OTHER CREWMEMBERS AS THEY PASSED THE SIGNALS AND THEY HAD QUIT PAYING ATTENTION.

BRIEF OF ACCIDENT, continued

File No. - 618

08/04/94

LENWOOD, CA

Time (Lcl) - 0940 PDT

Occurrence #1 - COLLISION, REAR
Phase - STANDING

Finding(s)

1. TRAIN - STOPPED

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the failure of the crew of Extra 564 East to observe and comply with signal indications due to their inattentiveness.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # ATL94FR011

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 619

08/10/94

ATLANTA, GA

Time (Lcl) - 0014 EDT

---Basic Information---

Reporting Railroad - MART	Property Losses	Injuries			
Type of Accident - DERAILMENT	Railroad - \$ 1,018,000.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 0.00	Employees 0	0	0	1
Method of Operation - AUTOMATIC TRAIN CO RADIO	Fire - NO	Passengers 0	0	0	60
		Motorist 0	0	0	0
		Other 0	0	0	0

MART - METROPOLITAN ATLANTA RAPID TRANSIT AUTH.

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - MART	No. Loco. Units - 6	Front End - 1
Type of Train - HEAVY RAIL TRANSIT	No. Cars/Caboose - N/A	Rear End - 0
Train ID - 109	End of Train Monitor - MARKER	Toxicology Performed - YES
Direction - EAST	Length (Feet) - 300	Radio Communications
Speed (Est.) - 12	Trailing Tons - N/A	Radio Available - YES
Speed (Auth.) - 0	Loco. Destroy/Derailed - 0/2	Operational - YES
	Cars Destroy/Derailed - N/A	

MART - METROPOLITAN ATLANTA RAPID TRANSIT AUTH.

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - NO
Condition of Light - DARK	INDIAN CREEK STATION, GA	Cars Involved - 0
	Destination	Track Information
Evacuation - YES	EAST LAKE STATION, GA	Type/No. of Tracks - MAIN/3
		Gradient - LEVEL
		Alignment - TANGENT

---Narrative---

MART HEAVY RAIL RAPID TRANSIT TRAIN NO. 109 HAD THE 2 REAR CARS DERAIL WHEN THE OPERATOR BACKED THE TRAIN THROUGH A DAMAGED SWITCH. THE OPERATOR HAD BEEN ADVISED BY THE DISPATCHER TO PROCEED UNDER MANUAL CONTROL TO SIGNAL 230, WHICH DISPLAYED A STOP INDICATION, AND WAIT THERE FOR FURTHER INSTRUCTIONS. THE OPERATOR PROCEEDED BY THE STOP SIGNAL AND CONTINUED THROUGH A SWITCH THAT WAS LINED AGAINST THE TRAIN, DAMAGING THE SWITCH. THE DISPATCHER THEN INSTRUCTED THE OPERATOR TO BACK UP TO THE SIGNAL, WITHOUT ADVISING HER TO CHECK THE TRAIN OR THE SWITCH. AS THE TRAIN REVERSED DIRECTION THROUGH THE DAMAGED SWITCH, THE 2 LEAD CARS DERAILED. THERE WERE 60 PASSENGERS ON BOARD, AND NONE WERE INJURED.

BRIEF OF ACCIDENT, continued

File No. - 619

08/10/94

ATLANTA, GA

Time (Lcl) - 0014 EDT

Occurrence #1 - DERAILMENT
Phase - BACKING

Finding(s)

1. INTERLOCKING SIGNAL - NOT COMPLIED - ROAD PASSENGER ENGINEER/MOTORMAN
 2. VERBAL/RADIO/TELEPHONE PERMISSION - NOT COMPLIED - ROAD PASSENGER ENGINEER/MOTORMAN
 3. OPERATING RULES - NOT COMPLIED - TRAIN DIRECTOR
-

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the failure of the operator to comply with a stop signal, and the dispatcher instructing the operator to back the train through a ~~damaged~~ switch.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # ATL94FR012

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 620

08/10/94

NEW HAVEN, CT

Time (Lcl) - 0522 EDT

---Basic Information---

		Property Losses		Injuries			
		Railroad	Non-Railroad	Fatal	Serious	Minor	None
Reporting Railroad	- MNCW			Employees	0	0	0
Type of Accident	- DERAILMENT	\$ 15,700.00		Passengers	0	0	200
Operating Phase	- EN ROUTE	\$ 0.00		Motorist	0	0	0
Method of Operation	- AUTOMATIC BLOCK TRAFFIC CONTROL		Fire - NO	Other	0	0	0

MNCW - METRO NORTH COMMUTER RAILROAD COMPANY

---Railroad/Personnel Information---

Train Data		Train Consist/Damage		Crew Information	
Railroad	- ATK	No. Loco. Units	- 2	Front End	- 1
Type of Train	- PASSENGER	No. Cars/Caboose	- 7/0	Rear End	- 2
Train ID	- NO. 66	End of Train Monitor	- MARKER	Toxicology Performed	- NO
Direction	- EAST	Length (Feet)	- 870	Radio Communications	
Speed (Est.)	- 10	Trailing Tons	- 720	Radio Available	- YES
Speed (Auth.)	- 10	Loco. Destroy/Derailed	- N/A	Operational	- YES
		Cars Destroy/Derailed	- 0/1		

ATK - AMTRAK

---Environment/Operations Information---

Weather Data		Itinerary		Hazardous Materials	
Weather Condition	- CLEAR	Last Departure Point	NEW HAVEN, CT	Involved	- NO
Condition of Light	- DAWN	Destination	BOSTON, MA	Cars Involved	- 0
Evacuation	- NO			Track Information	
				Type/No. of Tracks	- MAIN/14
				Gradient	- LEVEL
				Alignment	- CURVE 8 D 0 M

---Narrative---

AMTRAK PASSENGER TRAIN NO. 66, MOVING AT 10 MPH ON THE NO. 8 STATION TRACK DERAILED THE LEAD AXLE OF THE REAR TRUCK ON THE REAR CAR OF THE TRAIN, AN EMPTY MATERIAL HANDLING CAR (MHC) THAT CARRIES MAIL. AFTER DEPARTING THE STATION, THE ENGINEER PERFORMED A RUNNING AIR BRAKE TEST AND AFTER RELEASING THE AUTOMATIC BRAKE, HE EXPERIENCED SLACK RUN IN. MOMENTS LATER THE TRAIN BRAKES WENT INTO EMERGENCY BRAKING. THE REAR CAR WAS MOVING THROUGH A 10 DEGREE REVERSE CURVE BETWEEN TWO SWITCHES WHEN THE WHEEL CLIMBED THE RAIL, AND RODE THE TOP OF THE NORTH RAIL FOR APPROXIMATELY 53 FEET, BEFORE DROPPING TO THE OUTSIDE OF THE RAIL. INVESTIGATION AND TESTING OF THE EQUIPMENT AND TRACK DISCLOSED NO ANOMALIES. THERE WERE NO INJURIES EITHER TO CREW MEMBERS OR PASSENGERS.

BRIEF OF ACCIDENT, continued

File No. - 620

08/10/94

NEW HAVEN, CT

Time (Lcl) - 0522 EDT

Occurrence #1 - TRACK/TRAIN DYNAMICS
Phase - MAINTAINING SPEED

Occurrence #2 - DERAILMENT
Phase - MAINTAINING SPEED

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the combination of the run-in after the engineer performed the running brake test and the track geometry caused a wheel
on the empty mail car to climb the gauge side of the north rail and derail.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # CHI94FR017

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 621

08/13/94

BOISE CITY, OK

Time (Lcl) - 1703 MDT

---Basic Information---

Reporting Railroad - ATSF	Property Losses	Injuries			
Type of Accident - DERAILMENT	Railroad - \$ 1,025,376.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 0.00	Employees 0	0	0	2
Method of Operation - TIMETABLE	Fire - NO	Passengers 0	0	0	0
RADIO		Motorist 0	0	0	0
		Other 0	0	0	0

ATSF - ATCHISON, TOPEKA AND SANTA FE RAILWAY COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - ATSF	No. Loco. Units - 5	Front End - 2
Type of Train - FREIGHT	No. Cars/Caboose - 116/0	Rear End - 0
Train ID - EXTRA 5116 EAST	End of Train Monitor - MONITOR	Toxicology Performed - YES
Direction - EAST	Length (Feet) - 6157	Radio Communications
Speed (Est.) - 45	Trailing Tons - 16237	Radio Available - YES
Speed (Auth.) - 49	Loco. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - 31/34	

ATSF - ATCHISON, TOPEKA AND SANTA FE RAILWAY COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLOUDY	Last Departure Point	Involved - NO
Condition of Light - DAYLIGHT	LAJUNTA, CO	Cars Involved - 0
	Destination	Track Information
Evacuation - NO	AMARILLO, TX	Type/No. of Tracks - MAIN/1
		Gradient - DES. 0.33
		Alignment - TANGENT

---Narrative---

ATSF FREIGHT TRAIN EXTRA 5116 EAST, A LOADED COAL TRAIN, HAD 34 CARS DERAIL WHILE MOVING 45 MPH ON 49 MPH TRACK. A SPEED RESTRICTION HAD BEEN IN EFFECT IN THE ACCIDENT AREA FOR ONE YEAR PRIOR TO THE ACCIDENT DUE TO IRREGULAR CROSS ELEVATION THAT RESULTED FROM INSUFFICIENT BALLAST. THE RESTRICTION HAD BEEN REMOVED 4 DAYS BEFORE THE DERAILMENT, AFTER BALLAST HAD BEEN ADDED TO THE TRACK. INVESTIGATION REVEALED THAT THE AMOUNT OF BALLAST IN THE AREA WAS INSUFFICIENT FOR THE TRACK STRUCTURE. TRACK INSPECTORS HAD NOT MONITORED THE TRACK CONDITIONS DURING OR AFTER THE REPAIRS WERE MADE. THE TRACK BED HAD COLLAPSED UNDER THE WEIGHT OF THE MOVING TRAIN. MANY CROSSTIES IN THE AREA HAD BEEN MARKED FOR REPLACEMENT DUE TO BEING DEFECTIVE, BUT HAD NOT BEEN REPLACED. THE TRACK STRUCTURE HAD BECOME SATURATED FROM RAINY WEATHER CONDITIONS.

BRIEF OF ACCIDENT, continued

File No. - 621

08/13/94

BOISE CITY, OK

Time (Lcl) - 1703 MDT

Occurrence #1 - TRACK COMPONENT SYSTEM/FAILURE/MALFUNCTION
Phase - MAINTAINING SPEED

Finding(s)

1. BALLAST - INADEQUATE
 2. CROSSTIES - ROTTED/WEATHERED
 3. INADEQUATE INSPECTION - MAINTENANCE OF WAY INSPECTOR
 4. INADEQUATE SUPERVISION - ROADMASTER
-

Occurrence #2 - DERAILMENT
Phase - MAINTAINING SPEED

Finding(s)

5. MAIN TRACK - WEAKENED
 6. MAIN TRACK - COLLAPSED
-

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the track structure collapsed under the moving train, due to inadequate ballast conditions, an excessive number of defective crossties, and the inadequate supervision of track repairs and inspections.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # ATL94FR013

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 622

08/15/94

BROOKLYN, NY

Time (local) - 1024 EDT

---Basic Information---

Reporting Railroad - MTA	Property Losses	Injuries			
Type of Accident - DERAILMENT	Railroad - \$ 1,015,000.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 0.00	Employees 0	0	0	2
Method of Operation - TRAFFIC CONTROL	Fire - NO	Passengers 0	3	8	189
AUTOMATIC TRAIN ST		Motorist 0	0	0	0
		Other 0	0	0	0

MTA - METRO. TRANSIT AUTH. (NYCTA)

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - MTA	No. Loco. Units - 10	Front End - 1
Type of Train - HEAVY RAIL TRANSIT	No. Cars/Caboose - N/A	Rear End - 1
Train ID - 0932B	End of Train Monitor - MARKER	Toxicology Performed - YES
Direction - SOUTH	Length (Feet) - 500	Radio Communications
Speed (Est.) - 10	Trailing Tons - 360	Radio Available - YES
Speed (Auth.) - 10	Loco. Destroy/Derailed - 1/1	Operational - YES
	Cars Destroy/Derailed - N/A	

MTA - METRO. TRANSIT AUTH. (NYCTA)

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - NO
Condition of Light - TUNNEL ARTIFICI	MANHATTAN, NY	Cars Involved - 0
	Destination	Track Information
	BROOKLYN, NY	Type/No. of Tracks - MAIN/4
Evacuation - YES		Gradient - LEVEL
		Alignment - CURVE 4 D 30 M

---Narrative---

NYCTA HEAVY RAIL SUBWAY TRANSIT TRAIN 0932B HAD THE EIGHTH CAR OF THE 10 CAR TRAIN DERAIL NORTH OF 9TH AVENUE STATION ON THE WEST END LINE IN BROOKLYN, NEW YORK. SWITCH 3 ON TRACK D3 OPERATED TO THE REVERSE POSITION UNDER THE MOVING CAR WHICH THEN DERAILED AND STRUCK THE CURTAIN WALL BETWEEN TRACKS D1 AND D3. NINE PASSENGERS AND TWO EMPLOYEES REPORTED INJURIES. MULTIPLE GROUND CONDITIONS WERE FOUND ON THE MAIN SIGNAL AND TRACK OCCUPANCY CIRCUIT IN THE INTERLOCKING AREA. THE INTERLOCKING DESIGN AND INSTALLATION DID NOT INCLUDE SEPARATE SWITCH DETECTOR CUT OFF RELAYS AND AUTOMATIC GROUND DETECTION OR INDICATION. THIS CONDITION PERMITTED THE TOWER OPERATOR TO OPERATE THE SWITCH WHILE THE TRAIN WAS MOVING OVER THE SWITCH, WITHOUT THE TOWER OPERATOR BEING AWARE THAT THE TRAIN IS STILL ON THE SWITCH. THE INTERLOCKING WAS INSTALLED IN 1919 AND HAD MOSTLY ORIGINAL CIRCUITRY.

BRIEF OF ACCIDENT, continued

File No. - 622

08/15/94

BROOKLYN, NY

Time (Lcl) - 1024 EDT

Occurrence #1 - DERAILMENT
Phase - ACCELERATING

Finding(s)

1. CIRCUIT CONTROLLER - INADEQUATE
 2. INADEQUATE SUBSTANTIATION PROCESS - COMPANY OPERATOR/MGMT
 3. CIRCUIT CONTROLLER - CIRCUITRY INADEQUATE FOR SITUATION
 4. FACILITY INADEQUATE DESIGN (standard/requirement) - EXECUTIVE/GENERAL OFFICER
-

Occurrence #2 - COLLISION WITH OBJECT
Phase - ACCELERATING

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the release of Switch Lever 3 while the train was moving over D-3 Switch, due to the design of the interlocking,
which does not include separate switch detector cut-off relays and automatic ground detection or indication.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # LAX94FR014

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 623

09/07/94

GILLETTE, WY

Time (Lcl) - 0800 MDT

---Basic Information---

Reporting Railroad - BN	Property Losses	Injuries			
Type of Accident - DERAILMENT	Railroad - \$ 2,562,400.00	Fatal	Serious	Minor	None
Operating Phase - SWITCHING	Non-Railroad - \$ 0.00	Employees 0	0	0	2
Method of Operation - TRAFFIC CONTROL	Fire - YES	Passengers 0	0	0	0
TIMETABLE		Motorist 0	0	0	0
		Other 0	0	0	0

BN - BURLINGTON NORTHERN RAILROAD COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - BN	No. Loco. Units - 5	Front End - 2
Type of Train - FREIGHT	No. Cars/Caboose - 114/0	Rear End - 0
Train ID - EXTRA 5113 EAST	End of Train Monitor - MONITOR	Toxicology Performed - YES
Direction - EAST	Length (Feet) - 6392	Radio Communications
Speed (Est.) - 24	Trailing Tons - 15504	Radio Available - YES
Speed (Auth.) - 10	Loco. Destroy/Derailed - 0/6	Operational - YES
	Cars Destroy/Derailed - 25/37	

BN - BURLINGTON NORTHERN RAILROAD COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - YES
Condition of Light - DAYLIGHT	GILLETTE, WY	Cars Involved - 8
	Destination	Track Information
Evacuation - YES	EDGEMONT, SD	Type/No. of Tracks - MAIN/7
		Gradient - DES. 0.80
		Alignment - TANGENT

---Narrative---

BN FREIGHT TRAIN EXTRA 5113 EAST HAD A TOTAL OF 6 LOCOMOTIVE UNITS AND 37 CARS DERAIL WHEN IT RAN DOWNGRADE INTO THE GILLETTE YARD AND STRUCK A STANDING UNATTENDED LOCOMOTIVE. 17 CARS DERAILED IN THE TRAIN, AND THEY DERAILED ANOTHER 20 CARS THAT WERE STANDING ON ADJACENT TRACKS. THE DERAILED CARS ALSO KNOCKED DOWN AN OVERHEAD PEDESTRIAN BRIDGE. A SMALL FIRE BROKE OUT AND WAS EXTINGUISHED BY A LOCAL FIRE COMPANY. ONE CREW HAD LEFT THE TRAIN TO GO OFF DUTY AND THOUGHT THEY HAD APPLIED THE AIR BRAKES ON THE TRAIN AND LOCOMOTIVES. IN REALITY, THEY HAD ONLY APPLIED THE BRAKES ON THE LOCOMOTIVES AND PARTIALLY APPLIED THE BRAKES ON THE REST OF THE TRAIN. ALSO, THEY HAD NOT APPLIED ANY HAND BRAKES TO ANY OF THE CARS. A NEW CREW THEN GOT ON THE TRAIN AND WAS GETTING IT READY TO GO OUT ON THE ROAD. THEY HAD BEEN INSTRUCTED TO UNCOUPLE THE LEAD LOCOMOTIVE, SET IT ON ANOTHER TRACK, THEN GO ON THE ROAD WITH THE TRAIN. WHILE MAKING THIS MOVEMENT, THE BRAKES RELEASED AND THE TRAIN ROLLED OFF DOWN THE GRADE.

BRIEF OF ACCIDENT, continued

File No. - 623

09/07/94

GILLETTE, WY

Time (Lcl) - 0800 MDT

Occurrence #1 - DERAILMENT
Phase - SETOUT IN YARD

Finding(s)

1. HANDBRAKE - NOT APPLIED
 2. BRAKE VALVE - CUT OUT
 3. BRAKES - IMPROPER USE OF - ENTIRE TRAIN CREW
 4. OPERATING RULES - NOT FOLLOWED - ENTIRE TRAIN CREW
-

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the failure of the inbound train crewmembers to properly secure the train before they left it unattended, and the failure of the outbound train crewmembers to insure the train was properly secured prior to removing the lead locomotive from the train.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # CHI94FR018A

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 624

09/14/94

HOBOKEN, NJ

Time (Lcl) - 0745 EDT

---Basic Information---

Reporting Railroad - NJTR	Property Losses		Injuries			
Type of Accident - COLLISION, SIDE	Railroad - \$ 140,000.00	Employees	Fatal	Serious	Minor	None
Operating Phase - SWITCHING	Non-Railroad - \$ 0.00	Passengers	0	0	0	3
Method of Operation - AUTOMATIC BLOCK	Fire - NO	Motorist	0	0	0	0
RADIO		Other	0	0	2	612

NJTR - NEW JERSEY TRANSIT RAIL OPERATIONS

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - NJTR	No. Loco. Units - 2	Front End - 2
Type of Train - LIGHT LOCOMOTIVE	No. Cars/Caboose - N/A	Rear End - 1
Train ID - CWP 8089	End of Train Monitor - MARKER	Toxicology Performed - YES
Direction - EAST	Length (Feet) - N/A	Radio Communications
Speed (Est.) - 8	Trailing Tons - N/A	Radio Available - YES
Speed (Auth.) - 0	Loco. Destroy/Derailed - 0/1	Operational - YES
	Cars Destroy/Derailed - N/A	

NJTR - NEW JERSEY TRANSIT RAIL OPERATIONS

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLOUDY	Last Departure Point	Involved - NO
Condition of Light - DAYLIGHT	HOBOKEN, NJ	Cars Involved - 0
	Destination	Track Information
Evacuation - NO	SUMMIT, NJ	Type/No. of Tracks - YARD/2
		Gradient - LEVEL
		Alignment - TANGENT

---Narrative---

TWO NJT LOCOMOTIVE UNITS, DESIGNATED AS WORK TRAIN NO. CWP 8089, COLLIDED WITH THE SIDE OF NJT PASSENGER TRAIN NO. 1052 AT A CROSSOVER SWITCH. 1052 WAS MOVING ON THE MAIN TRACK, AND 8089 WAS COMING OUT OF A YARD TRACK. 8089 HAD INTENDED TO MOVE OUT OF A SHOP AREA INTO AN INTERLOCKING, THEN REVERSE DIRECTION AND MOVE ONTO ANOTHER TRACK. 8089 WAS MOVING WITH A RESTRICTED SIGNAL INDICATION. THE CONDUCTOR AND BRAKEMAN WERE IN THE FORWARD UNIT, AND THE ENGINEER WAS OPERATING FROM THE REAR UNIT WITH HIS VIEW OF THE SIGNALS OBSTRUCTED. THE BRAKEMAN THEN OBSERVED THE NEXT SIGNAL DISPLAYING A STOP INDICATION AND TOLD THE CONDUCTOR. THE CONDUCTOR MOVED TO THE BRAKEMAN'S VANTAGE POINT TO VERIFY THE SIGNAL BECAUSE HE WAS ANTICIPATING A DIFFERENT ROUTE. THE CONDUCTOR SAID HE TRIED TO CALL THE ENGINEER BY RADIO TO STOP THE TRAIN, BUT WAS UNSUCCESSFUL. NEITHER CREWMEMBER ATTEMPTED TO ACTIVATE THE EMERGENCY BRAKE VALVE. 8089 PASSED THE STOP SIGNAL AND COLLIDED INTO THE SIDE OF 1052 AT THE SWITCH. TWO PASSENGERS SUSTAINED MINOR INJURIES.

BRIEF OF ACCIDENT, continued

File No. - 624

09/14/94

HOBOKEN, NJ

Time (Lcl) - 0745 EDT

Occurrence #1 - COLLISION, SIDE
Phase - MAINTAINING SPEED

Finding(s)

1. BRAKES - NOT USED - YARD CONDUCTOR/YARD FOREMAN
 2. BRAKES - NOT USED - YARD CONDUCTOR/YARD FOREMAN
 3. INTERLOCKING SIGNAL - NOT COMPLIED - YARD CONDUCTOR/YARD FOREMAN
 4. INTERLOCKING SIGNAL - NOT COMPLIED - YARD BRAKEMAN/YARD HELPER
-

Occurrence #2 - DERAILMENT
Phase - MAINTAINING SPEED

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the conductor and brakeman of train CWP 8089 failed to control the movement of their train and failed to stop at
the stop signal.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # CHI94FR018B

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 624

09/14/94

HOBOKEN, NJ

Time (Lcl) - 0745 EDT

---Basic Information---

Reporting Railroad - NJTR	Property Losses	Injuries			
Type of Accident - COLLISION, SIDE	Railroad - \$ 68,000.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 0.00	Employees 0	0	0	4
Method of Operation - RADIO	Fire - NO	Passengers 0	0	2	608
INTERLOCKING		Motorist 0	0	0	0
		Other 0	0	0	3

NJTR - NEW JERSEY TRANSIT RAIL OPERATIONS

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - NJTR	No. Loco. Units - 2	Front End - 2
Type of Train - PASSENGER	No. Cars/Caboose - 5/0	Rear End - 2
Train ID - NO. 1052	End of Train Monitor - MARKER	Toxicology Performed - NO
Direction - EAST	Length (Feet) - 420	Radio Communications
Speed (Est.) - 8	Trailing Tons - N/A	Radio Available - YES
Speed (Auth.) - 10	Loco. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - 0/1	

NJTR - NEW JERSEY TRANSIT RAIL OPERATIONS

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLOUDY	Last Departure Point	Involved - NO
Condition of Light - DAYLIGHT	NETCONG, NJ	Cars Involved - 0
	Destination	Track Information
Evacuation - NO	HOBOKEN, NJ	Type/No. of Tracks - YARD/2
		Gradient - LEVEL
		Alignment - TANGENT

---Narrative---

TWO NJT LOCOMOTIVE UNITS, DESIGNATED AS WORK TRAIN NO. CWP 8089, COLLIDED WITH THE SIDE OF NJT PASSENGER TRAIN NO. 1052 AT A CROSSOVER SWITCH. 1052 WAS MOVING ON THE MAIN TRACK, AND 8089 WAS COMING OUT OF A YARD TRACK. 8089 HAD INTENDED TO MOVE OUT OF A SHOP AREA INTO AN INTERLOCKING, THEN REVERSE DIRECTION AND MOVE ONTO ANOTHER TRACK. 8089 WAS MOVING WITH A RESTRICTED SIGNAL INDICATION. THE CONDUCTOR AND BRAKEMAN WERE IN THE FORWARD UNIT, AND THE ENGINEER WAS OPERATING FROM THE REAR UNIT WITH HIS VIEW OF THE SIGNALS OBSTRUCTED. THE BRAKEMAN THEN OBSERVED THE NEXT SIGNAL DISPLAYING A STOP INDICATION AND TOLD THE CONDUCTOR. THE CONDUCTOR MOVED TO THE BRAKEMAN'S VANTAGE POINT TO VERIFY THE SIGNAL BECAUSE HE WAS ANTICIPATING A DIFFERENT ROUTE. THE CONDUCTOR SAID HE TRIED TO CALL THE ENGINEER BY RADIO TO STOP THE TRAIN, BUT WAS UNSUCCESSFUL. NEITHER CREWMEMBER ATTEMPTED TO ACTIVATE THE EMERGENCY BRAKE VALVE. 8089 PASSED THE STOP SIGNAL AND COLLIDED INTO THE SIDE OF 1052 AT THE SWITCH. TWO PASSENGERS SUSTAINED MINOR INJURIES.

BRIEF OF ACCIDENT, continued

File No. - 624

09/14/94

HOBOKEN, NJ

Time (Lcl) - 0745 EDT

Occurrence #1 - COLLISION, SIDE
Phase - MAINTAINING SPEED

Finding(s)

1. INTERLOCKING SIGNAL - NOT COMPLIED - CREW MEMBER OF OTHER TRAIN
 2. SIGNAL INDICATION - NOT COMPLIED - ENGINEER OF OTHER TRAIN
-

Occurrence #2 - DERAILMENT
Phase - MAINTAINING SPEED

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the conductor and brakeman of train CWP 8089 failed to control the movement of their train and failed to stop at
the stop signal.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # LAX94FR015

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 625

09/23/94

PALMDALE, CA

Time (Lcl) - 0900 PDT

---Basic Information---

Reporting Railroad - SP	Property Losses	Injuries			
Type of Accident - MISCELLANEOUS	Railroad - \$ 1,700.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 0.00	Employees	2	0	4
Method of Operation - TRAFFIC CONTROL	Fire - NO	Passengers	0	0	0
TIMETABLE		Motorist	0	0	0
		Other	0	0	0

SP - SOUTHERN PACIFIC TRANSPORTATION COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - SP	No. Loco. Units - 0	Front End - 1
Type of Train - TRACK CAR	No. Cars/Caboose - N/A	Rear End - 0
Train ID - TI 200	End of Train Monitor - NO	Toxicology Performed - YES
Direction - EAST	Length (Feet) - N/A	Radio Communications
Speed (Est.) - 30	Trailing Tons - N/A	Radio Available - YES
Speed (Auth.) - 5	Loco. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - N/A	

SP - SOUTHERN PACIFIC TRANSPORTATION COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - NO
Condition of Light - DAYLIGHT	PALMDALE, CA	Cars Involved - 0
	Destination	Track Information
Evacuation - NO	HILAND, CA	Type/No. of Tracks - MAIN/1
		Gradient - DES. 0.26
		Alignment - TANGENT

---Narrative---

SP MAINTENANCE OF WAY TRACK HI-RAIL VEHICLE NO. TI 200, BEING OPERATED ON THE TRACK BY A TRACK INSPECTOR, STRUCK AND SERIOUSLY INJURED 2 SP SIGNAL DEPARTMENT EMPLOYEES AT A TURNOUT ON THE MAIN TRACK. THE INSPECTION VEHICLE WAS MOVING 30 MPH ON 5 MPH TRACK. FIVE SIGNALMEN WERE INSPECTING THE LOCATION TO DETERMINE WHAT ADDITIONAL MATERIAL WOULD BE REQUIRED TO ELECTRICALLY INTERLOCK THE TURNOUT SWITCH, A DERAILING DEVICE, AND AN ELECTRIC LOCK THAT HAD BEEN RECENTLY INSTALLED AT THAT LOCATION. THE 2 INJURED EMPLOYEES WERE STANDING ADJACENT TO THE MAIN TRACK FACING THE ELECTRIC LOCK, WITH THEIR BACKS TOWARD THE TRACK. THE TRACK INSPECTOR STATED THAT HE WAS TRAVELING 30 MPH WITH THE INSPECTION VEHICLE OPERATING IN CRUISE CONTROL. HE SAID HE WAS DOING PAPER WORK AND WAS NOT LOOKING WHERE HE WAS GOING. THE SIGNAL CREW DID NOT HAVE A LOOKOUT POSTED TO WATCH FOR TRAINS.

BRIEF OF ACCIDENT, continued

File No. - 625

09/23/94

PALMDALE, CA

Time (Lcl) - 0900 PDT

Occurrence #1 - MISCELLANEOUS/OTHER
Phase - MAINTAINING SPEED

Finding(s)

1. HIGH-RAIL VEHICLE - OVERSPEED
 2. SPEED - EXCESSIVE - MOTOR VEHICLE/MOTOR CAR OPERATOR
 3. INATTENTIVE - MOTOR VEHICLE/MOTOR CAR OPERATOR
 4. VEHICLE HANDLING - IMPROPER - MOTOR VEHICLE/MOTOR CAR OPERATOR
 5. SAFETY RULES - NOT COMPLIED - SIGNALMAN/SIGNAL MAINTAINER
 6. PROTECTION OF TRACK WORK RULES - NOT USED - SIGNALMAN/SIGNAL MAINTAINER
-

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was: the failure of the track inspector to observe the track ahead while operating the hi-rail vehicle in excess of the maximum authorized speed and on cruise control, the failure of the signalmen to be alert for approaching equipment, and the failure of the signal department employees to have a lookout posted.

NATIONAL TRANSPORTATION SAFETY BOARD
 WASHINGTON, D.C. 20594

NTSB # LAX94FR016

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 526

09/26/94

YESO, NM

Time (Lcl) - 1745 MDT

---Basic Information---

Reporting Railroad - ATSF	Property Losses		Injuries			
Type of Accident - EMPLOYEE FATALITY	Railroad - \$	0.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$	0.00	Employees	0	0	0
Method of Operation - TRAFFIC CONTROL	Fire - NO		Passengers	0	0	0
TIMETABLE			Motorist	0	0	0
			Other	0	0	0

ATSF - ATCHISON, TOPEKA AND SANTA FE RAILWAY COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - ATSF	No. Loco. Units - 4	Front End - 3
Type of Train - FREIGHT	No. Cars/Caboose - 61/0	Rear End - 0
Train ID - EXTRA 561 EAST	End of Train Monitor - MONITOR	Toxicology Performed - YES
Direction - EAST	Length (Feet) - 5755	Radio Communications
Speed (Est.) - 68	Trailing Tons - 4411	Radio Available - YES
Speed (Auth.) - 70	Loco. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - N/A	

ATSF - ATCHISON, TOPEKA AND SANTA FE RAILWAY COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - NO
Condition of Light - DAYLIGHT	BELEN, NM	Cars Involved - 0
	Destination	Track Information
Evacuation - NO	CLOVIS, NM	Type/No. of Tracks - MAIN/2
		Gradient - DES. 0.60
		Alignment - TANGENT

---Narrative---

ATSF FREIGHT TRAIN EXTRA 561, MOVING 68 MPH ON 70 MPH TRACK, STRUCK AND FATALLY INJURED A MAINTENANCE OF WAY EMPLOYEE. THE EMPLOYEE WAS WORKING AS PART OF A CONSTRUCTION GANG THAT WAS CONNECTING 3 CONSECUTIVE SIDINGS TOGETHER TO FORM A NEW ADJACENT MAIN TRACK. HE HAD BEEN WORKING BETWEEN 2 PIECES OF TRACK MACHINERY THAT WERE WORKING ON THE NEW TRACK. THE OPERATOR OF ONE OF THE MACHINES SIGNALLED HE WAS GOING TO BACK UP. THE TRACK EMPLOYEE THEN STEPPED AWAY FROM THE NEW TRACK AND INTO THE PATH OF THE TRAIN THAT WAS APPROACHING ON THE EXISTING MAIN TRACK. THE TRACK MACHINES WERE REPORTEDLY VERY LOUD AND MADE IT DIFFICULT TO HEAR THE TRAIN'S HORN. MAINTENANCE OF WAY RULES REQUIRE A LOOKOUT IN LOUD NOISE SITUATIONS, AND THE LOOKOUT MUST CARRY A POLICE WHISTLE FOR ADDITIONAL WARNING. THE LOOKOUT AT THIS WORK SITE DID NOT HAVE A WHISTLE. THE DECEASED EMPLOYEE WAS TAKING DIABETES MEDICATION, HAD BEEN WORKING LONG HOURS FOR SEVERAL DAYS, AND HIS WIFE STATED HE HAD BEEN UNUSUALLY TIRED LATELY.

BRIEF OF ACCIDENT, continued

File No. - 626

09/26/94

YESO, NM

Time (Lcl) - 1745 MDT

Occurrence #1 - FATALITY, EMPLOYEE
Phase - MAINTAINING SPEED

Finding(s)

1. PROTECTION OF TRACK WORK RULES - NOT COMPLIED - TRACK GANG FOREMAN
 2. FATIGUE (chronic) - MAINTENANCE OF WAY LABORER
 3. WORKPLACE NOISE/DISTRACTION - MAINTENANCE OF WAY LABORER
-

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the failure of the track employee to be alert to moving trains on adjacent tracks, possibly due to fatigue.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # ATL95FR001

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 627

10/03/94

MANHATTAN, NY

Time (Lcl) - 0914 EDT

---Basic Information---

Reporting Railroad - MTA	Property Losses		Injuries			
Type of Accident - EMPLOYEE FATALITY	Railroad - \$	0.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$	0.00	Employees	0	0	0
Method of Operation - AUTOMATIC BLOCK	Fire - NO		Passengers	0	0	35
AUTOMATIC TRAIN ST			Motorist	0	0	0
			Other	0	0	0

MTA - METRO. TRANSIT AUTH. (NYCTA)

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - MTA	No. Loco. Units - 8	Front End - 1
Type of Train - HEAVY RAIL TRANSIT	No. Cars/Caboose - N/A	Rear End - 1
Train ID - 819C	End of Train Monitor - MARKER	Toxicology Performed - YES
Direction - NORTH	Length (Feet) - N/A	Radio Communications
Speed (Est.) - 35	Trailing Tons - N/A	Radio Available - YES
Speed (Auth.) - 35	Loco. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - N/A	

MTA - METRO. TRANSIT AUTH. (NYCTA)

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - N/A	Last Departure Point	Involved - NO
Condition of Light - TUNNEL	MANHATTAN, NY	Cars Involved - 0
	Destination	Track Information
	MANHATTAN, NY	Type/No. of Tracks - MAIN/2
Evacuation - NO		Gradient - LEVEL
		Alignment - TANGENT

---Narrative---

A NYCTA STATION PORTER WAS FATALLY INJURED WHEN HE WAS STRUCK BY NORTHBOUND SUBWAY TRAIN NO. 819C AT THE SOUTH END OF THE PLATFORM AT THE 81ST STREET STATION. WITNESSES STATED THAT THE PORTER HAD BEEN WORKING NEAR THE END OF THE PLATFORM, COLLECTING TRASH IN A PLASTIC BAG. HE WAS OBSERVED DOWN ON THE TRACK PICKING UP PAPERS. THE TRAIN OPERATOR FIRST SAW WHAT HE THOUGHT WAS NEWSPAPER BLOWING AROUND ON THE TRACK, THEN REALIZED IT WAS A PERSON TRYING TO PULL HIMSELF BACK ONTO THE PLATFORM. THE OPERATOR APPLIED THE BRAKES IN EMERGENCY, BUT THE TRAIN COULD NOT STOP BEFORE STRIKING THE PORTER. THE PORTER WAS ONLY AUTHORIZED TO CLEAN PLATFORMS, AND WAS NOT TO BE ON THE TRACKS. PERSONNEL WORKING ON THE TRACK AREA ARE REQUIRED TO WEAR REFLECTIVE VESTS AND HAVE FLAGGING PROTECTION, AND NONE WAS IN USE AT THE TIME OF THE ACCIDENT.

BRIEF OF ACCIDENT, continued

File No. - 627

10/03/94

MANHATTAN, NY

Time (Lcl) - 0914 EDT

Occurrence #1 - FATALITY, EMPLOYEE
Phase - MAINTAINING SPEED

Finding(s)

1. SAFETY RULES - NOT COMPLIED - JANITOR/CLEANER
 2. PROTECTION OF TRACK WORK RULES - NOT COMPLIED - JANITOR/CLEANER
-

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the station porter getting on the track to pick up trash without authorization or protection.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # CHI95FR001

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 628

10/06/94

WILLARD, OH

Time (Lcl) - 1258 EDT

---Basic Information---

Reporting Railroad - CSX	Property Losses	Injuries			
Type of Accident - DERAILMENT	Railroad - \$ 2,723,018.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 0.00	Employees 0	0	0	2
Method of Operation - YARD RULES	Fire - NO	Passengers 0	0	0	0
AUTOMATIC BLOCK		Motorist 0	0	0	0
		Other 0	0	0	1

CSX - CSX TRANSPORTATION

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - CSX	No. Loco. Units - 4	Front End - 2
Type of Train - FREIGHT	No. Cars/Caboose - 58/0	Rear End - 0
Train ID - EXTRA 6389 EAST	End of Train Monitor - MONITOR	Toxicology Performed - YES
Direction - EAST	Length (Feet) - 7151	Radio Communications
Speed (Est.) - 43	Trailing Tons - 4787	Radio Available - YES
Speed (Auth.) - 50	Loco. Destroy/Derailed - 0/3	Operational - YES
	Cars Destroy/Derailed - 8/22	

CSX - CSX TRANSPORTATION

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - NO
Condition of Light - DAYLIGHT	BEDFORD PARK, IL	Cars Involved - 0
	Destination	Track Information
Evacuation - NO	WILLARD, OH	Type/No. of Tracks - MAIN/9
		Gradient - LEVEL
		Alignment - TANGENT

---Narrative---

CSXT FREIGHT TRAIN EXTRA 6389 EAST HAD 3 LOCOMOTIVE UNITS AND 13 CARS DERAIL WHILE TRAVELING 43 MPH ON 50 MPH TRACK. THE TRAIN STRUCK A LARGE PIECE OF SCRAP METAL THAT HAD FALLEN FROM A TRAIN THAT PASSED ON THE ADJACENT TRACK ABOUT 30 MINUTES EARLIER. THE CAR CARRYING THE SCRAP HAD BEEN INSPECTED 3 TIMES IN TOLEDO; ONCE BY THE CREW THAT SWITCHED THE CAR FROM AN INDUSTRIAL SIDING, AND TWICE BY CARMEN. NO EXCEPTIONS WERE TAKEN DURING THESE INSPECTIONS. AFTER THE TRAIN LEFT TOLEDO, THE ENGINEER REPORTED SCRAP HANGING OVER THE SIDE OF A CAR IN THE TRAIN. THE CARMEN WENT TO THE TRAIN AND PUSHED A PIECE OF SCRAP BACK INTO THE CAR. AFTER THE ACCIDENT, INSPECTION OF THE CAR REVEALED THAT IT HAD SCRAP PILED 30 INCHES ABOVE THE TOP OF THE CAR SIDES, WHICH EXCEEDS CSXT STANDARDS THAT ONLY ALLOW 18 INCHES. THERE ALSO WERE 2 PIECES OF SCRAP HANGING OVER THE SIDES OF THE CAR.

BRIEF OF ACCIDENT, continued

File No. - 628

10/06/94

WILLARD, OH

Time (Lc1) - 1258 EDT

Occurrence #1 - COLLISION WITH OBJECT
Phase - MAINTAINING SPEED

Finding(s)

1. OBJECT ON TRACK - METAL
 2. CARGO - IMPROPERLY SECURED
 3. CARGO LOADING/UNLOADING - IMPROPERLY INSTALLED - SHIPPER
 4. EQUIPMENT INSPECTION - INADEQUATE - CARMAN
-

Occurrence #2 - DERAILMENT
Phase - STOPPING

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was: the train striking a piece of scrap metal that fell from another train, the improper loading of the scrap by shippers, and the failure of car inspectors to properly inspect and repair the car load.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # LAX95FR001

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 629

10/13/94

CASPER, WY

Time (Lcl) - 1140 MDT

---Basic Information---

Reporting Railroad - BN	Property Losses	Injuries			
Type of Accident - DERAILMENT	Railroad - \$ 3,434,000.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 0.00	Employees	0	0	0
Method of Operation - TIMETABLE	Fire - YES	Passengers	0	0	0
TRACK WARRANT CONT		Motorist	0	0	0
		Other	0	0	0

BN - BURLINGTON NORTHERN RAILROAD COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - BN	No. Loco. Units - 2	Front End - 2
Type of Train - FREIGHT	No. Cars/Caboose - 67/0	Rear End - 0
Train ID - EXTRA 8567 EAST	End of Train Monitor - MONITOR	Toxicology Performed - YES
Direction - EAST	Length (Feet) - 4367	Radio Communications
Speed (Est.) - 49	Trailing Tons - 5989	Radio Available - YES
Speed (Auth.) - 49	Locc. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - 21/29	

BN - BURLINGTON NORTHERN RAILROAD COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLOUDY	Last Departure Point	Involved - YES
Condition of Light - DAYLIGHT	GREYBULL, MT	Cars Involved - 2
	Destination	Track Information
Evacuation - NO	CASPER, WY	Type/No. of Tracks - MAIN/1
		Gradient - LEVEL
		Alignment - TANGENT

---Narrative---

BN FREIGHT TRAIN EXTRA 8567 EAST, MOVING 49 MPH ON 49 MPH TRACK, HAD 29 CARS DERAIL WHEN A SHIFTED LOAD STRUCK A BRIDGE. 70 MILES PRIOR TO THIS LOCATION, THE TRAIN HAD STRUCK AND KILLED 40 COWS THAT WERE ON THE TRACK. THE TRAIN BRAKES WENT INTO EMERGENCY AT THAT TIME. AFTER REMOVING SEVERAL COWS FROM UNDER THE TRAIN, THE CONDUCTOR RECONNECTED 4 AIR BRAKE HOSES IN THE TRAIN AND THE TRAIN PROCEEDED. THE CONDUCTOR HAD NOT INSPECTED THE TRAIN AFTER THE EMERGENCY APPLICATION, AS REQUIRED BY OPERATING RULES. A FLAT CAR LOADED WITH TELEPHONE POLES AND SECURED WITH FIR STAKES HAD SEVERAL OF THE STAKES BROKEN OFF DURING THE EMERGENCY APPLICATION. THE FAILED SIDE STAKES DID NOT CONFORM TO AAR STANDARDS. JUST PRIOR TO THE BRIDGE PORTAL WAS A LOW AND MISALIGNED RAIL JOINT. WHEN THE TRAIN WENT OVER THIS JOINT, THE IMPROPERLY SECURED POLES SHIFTED AND STRUCK THE BRIDGE, WHICH STARTED THE DERAILMENT. TWO TANK CARS CARRYING SULFURIC ACID AND METHANOL WERE BREACHED AND THE HAZARDOUS MATERIALS WERE RELEASED INTO THE WATER BELOW THE BRIDGE.

BRIEF OF ACCIDENT, continued

File No. - 629

10/13/94

CASPER, WY

Time (lcl) - 1140 MDT

Occurrence #1 - DERAILMENT
Phase - MAINTAINING SPEED

Finding(s)

1. EQUIPMENT INSPECTION - NOT PERFORMED - ROAD FREIGHT CONDUCTOR (through freight)
 2. CONTAINER - IMPROPERLY SECURED
 3. CARGO LOADING/UNLOADING - NOT COMPLIED - SHIPPER
 4. CONTAINER - DAMAGE
 5. CONTAINER - SHIFTED
 6. RAIL JOINT(S) - DEFECTIVE
-

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the conductor's failure to properly inspect his train after an emergency application of the train brakes as required by operating rules, the shipper's use of improper side stakes to secure the load of poles, and defective track conditions on the approach to the bridge.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # LAX95FR002

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 630

10/16/94

WILLCOX, AZ

Time (Lcl) - 2130 MST

---Basic Information---

Reporting Railroad - SP	Property Losses	Injuries			
Type of Accident - DERAILMENT	Railroad - \$ 2,002,000.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 0.00	Employees 0	0	0	2
Method of Operation - TRAFFIC CONTROL	Fire - NO	Passengers 0	0	0	0
TIMETABLE		Motorist 0	0	0	0
		Other 0	0	0	0

SP - SOUTHERN PACIFIC TRANSPORTATION COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - SP	No. Loco. Units - 4	Front End - 2
Type of Train - FREIGHT	No. Cars/Caboose - 39/0	Rear End - 0
Train ID - EXTRA 8012 EAST	End of Train Monitor - MONITOR	Toxicology Performed - YES
Direction - EAST	Length (Feet) - 6367	Radio Communications
Speed (Est.) - 57	Trailing Tons - 4237	Radio Available - YES
Speed (Auth.) - 50	Loco. Destroy/Derailed - 0/3	Operational - YES
	Cars Destroy/Derailed - 13/13	

SP - SOUTHERN PACIFIC TRANSPORTATION COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - NO
Condition of Light - DARK	TUCSON, AZ	Cars Involved - 0
	Destination	Track Information
Evacuation - NO	EL PASO, TX	Type/No. of Tracks - MAIN/3
		Gradient - DES. 0.26
		Alignment - TANGENT

---Narrative---

SP FREIGHT TRAIN EXTRA 8012 HAD 3 LOCOMOTIVE UNITS AND 13 CARS DERAIL WHILE MOVING 57 MPH ON 60 MPH TRACK. INVESTIGATION REVEALED THAT AN AXLE ON THE SECOND LOCOMOTIVE HAD OVERHEATED AND BROKE BETWEEN THE WHEELS, DERAILING THE LOCOMOTIVE. AN INCORRECT GRADE OF OIL WAS PRESENT IN THE WICK RESERVOIR ON THE GEAR SIDE BOX OF THE TRACTION MOTOR ON THE AXLE. THE HIGH CONTAMINATION OF SOLIDS AND HIGH VISCOSITY OF THE OIL PLUGGED THE WICK, RESULTING IN THE FAILURE OF THE WICK TO PICK UP LUBRICATION FOR THE AXLE SUPPORT BEARING AND THE SUBSEQUENT OVERHEATING OF THE AXLE. THE TRAIN HAD PASSED A HOTBOX DETECTOR ABOUT 12 MILES BEFORE THE ACCIDENT SITE.

BRIEF OF ACCIDENT, continued

File No. - 630

10/16/94

WILCOX, AZ

Time (Lcl) - 2130 MST

Occurrence #1 - TRAIN COMPONENT SYSTEM/FAILURE/MALFUNCTION
Phase - MAINTAINING SPEED

Finding(s)

1. SUSPENSION BEARINGS LUBRICATION - CONTAMINATION
 2. SUSPENSION BEARINGS LUBRICATION - INCORRECT ASSEMBLY/PART
 3. EQUIPMENT MAINTENANCE - INADEQUATE - DIVISION OFFICER
 4. MATERIAL INADEQUATE, IMPROPER - DIVISION OFFICER
 5. SUSPENSION BEARINGS - OVERHEATED
 6. SUSPENSION BEARINGS - FAILURE (TOTAL)
 7. AXLE BETWEEN WHEELS - BROKEN
-

Occurrence #2 - DERAILMENT
Phase - MAINTAINING SPEED

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
a locomotive axle overheating and breaking due to a lack of lubrication for the traction motor support bearing, which was due to the incorrect viscosity of oil that was highly contaminated with solids that plugged the lubricating wick.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # ATL95FR002

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 631

10/17/94

DONALDSONVILLE, LA

Time (Lcl) - 1230 CDT

---Basic Information---

Reporting Railroad - UP	Property Losses	Injuries			
Type of Accident - EMPLOYEE FATALITY	Railroad - \$ 0.00	Fatal	Serious	Minor	None
Operating Phase - SWITCHING	Non-Railroad - \$ 0.00	Employees 1	0	0	2
Method of Operation - YARD RULES	Fire - NO	Passengers 0	0	0	0
RADIO		Motorist 0	0	0	0
		Other 0	0	0	0

UP - UNION PACIFIC RAILROAD COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - UP	No. Loco. Units - 2	Front End - 2
Type of Train - CUT OF CARS	No. Cars/Caboose - 54/0	Rear End - 1
Train ID - LRA 0317	End of Train Monitor - NO	Toxicology Performed - YES
Direction - WEST	Length (Feet) - 3207	Radio Communications
Speed (Est.) - 4	Trailing Tons - 1940	Radio Available - YES
Speed (Auth.) - 0	Loco. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - N/A	

UP - UNION PACIFIC RAILROAD COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLOUDY	Last Departure Point	Involved - NO
Condition of Light - DAYLIGHT	DONALDSONVILLE, LA	Cars Involved - 0
	Destination	Track Information
Evacuation - NO	DONALDSONVILLE, LA	Type/No. of Tracks - YARD/3
		Gradient - LEVEL
		Alignment - TANGENT

---Narrative---

A 3 PERSON CREW WAS SWITCHING CARS AT DONALDSONVILLE YARD. THE CREW HAD COUPLED A CUT OF CARS ON TRACK 2 AND PLANNED TO MAKE A CUT ON 45 OF THE 54 CARS AND THEN SHOVE THE 45 CARS INTO TRACK 3. THE BRAKEMAN WAS STANDING AT THE WEST END OF THE 45TH CAR AND SIGNALLED TO THE ENGINEER VIA RADIO TO STOP. THE BRAKEMAN THEN TOLD THE ENGINEER TO "DRAG ON", BUT THE EVENT RECORDER INDICATED THAT THE LOCOMOTIVE BACKED UP OR REVERSED DIRECTION. THE BRAKEMAN SCREAMED OVER THE RADIO AND WAS FOUND BY THE CONDUCTOR COUPLED BETWEEN THE 45TH AND 46TH CARS. CARRIER SAFETY RULES PROHIBIT EMPLOYEES FROM GOING BETWEEN EQUIPMENT IF THE OPENING IS LESS THAN ONE CAR LENGTH.

BRIEF OF ACCIDENT, continued

File No. - 631

10/17/94

DONALDSONVILLE, LA

Time (Lcl) - 1230 CDT

Occurrence #1 - FATALITY, EMPLOYEE
Phase - BACKING

Finding(s)

1. SAFETY RULES - NOT COMPLIED - YARD BRAKEMAN/YARD HELPER
 2. COMPLACENCY - YARD BRAKEMAN/YARD HELPER
 3. RADIO RULES - NOT COMPLIED - YARD ENGINEER/MOTORMAN
-

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the engineer reversing the movement when he had received instructions to pull forward and the trainman attempting to cross between standing equipment without sufficient clearance.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # ATL95FR003

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 632

10/21/94

MANHATTAN, NY

Time (Lcl) - 0307 EDT

---Basic Information---

Reporting Railroad - MTA	Property Losses	Injuries			
Type of Accident - EMPLOYEE FATALITY	Railroad - \$ 0.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 0.00	Employees 1	0	0	2
Method of Operation - AUTOMATIC BLOCK	Fire - NO	Passengers 0	0	0	0
AUTOMATIC TRAIN ST		Motorist 0	0	0	0
		Other 0	0	0	0

MTA - METRO. TRANSIT AUTH. (NYCTA)

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - MTA	No. Loco. Units - 8	Front End - 1
Type of Train - HEAVY RAIL TRANSIT	No. Cars/Caboose - N/A	Rear End - 2
Train ID - 201D	End of Train Monitor - MARKER	Toxicology Performed - YES
Direction - NORTH	Length (Feet) - 600	Radio Communications
Speed (Est.) - 8	Trailing Tons - 450	Radio Available - YES
Speed (Auth.) - 10	Loco. Destroy/Derailed - N/A	Operational - NO
	Cars Destroy/Derailed - N/A	

MTA - METRO. TRANSIT AUTH. (NYCTA)

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - N/A	Last Departure Point	Involved - NO
Condition of Light - TUNNEL ARTIFICI	CONEY ISLAND, NY	Cars Involved - 0
	Destination	Track Information
Evacuation - NO	BROOKLYN, NY	Type/No. of Tracks - MAIN/2
		Gradient - ASC. 0.30
		Alignment - TANGENT

---Narrative---

NYCTA RAPID TRANSIT SUBWAY TRAIN NO. 201D STRUCK AND FATALLY INJURED A FLAGMAN IN A SUBWAY TUNNEL. THE ACCIDENT OCCURRED ABOUT 800 FEET WEST OF 4TH STREET STATION. THE FLAGMAN WAS PROVIDING FLAG PROTECTION FOR A CONTRACTOR CREW THAT WAS DOING SIGNAL WORK NEAR THE 4TH STREET STATION. THE WORK WAS BEING PERFORMED UNDER FLAG PROTECTION, SUPPLEMENTED BY A GENERAL ORDER. SAFETY RULES REQUIRE THE FLAGMAN TO BE ALERT AND PROVIDE PROTECTION FOR THE SIGNAL CREW BY ALERTING THEM WHEN A TRAIN IS APPROACHING. MARKS FOUND AT THE CLEARANCE AREA IN THE CONCRETE CRASH WALL INDICATE THAT THE FLAGMAN WAS SITTING DOWN, FOR UNKNOWN REASONS. MARKS ON THE FRONT TRUCK OF THE LEAD CAR OF THE TRAIN INDICATED THAT HE WAS CLOSE ENOUGH TO THE TRACK TO BE CAUGHT AND DRAGGED BY THE TRUCK OF THE LEAD CAR. THE TRAIN OPERATOR STATED HE DID NOT SEE THE FLAGMAN AT ANY TIME.

BRIEF OF ACCIDENT, continued

File No. - 632

10/21/94

MANHATTAN, NY

Time (Lcl) - 0307 EDT

Occurrence #1 - FATALITY, EMPLOYEE
Phase - DECELERATING

Finding(s)

1. SAFETY RULES - NOT COMPLIED - FOREMAN (skilled labor)
 2. INATTENTIVE - FOREMAN (skilled labor)
-

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the failure of the flagman to be attentive to approaching trains, for unknown reasons.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # CHI95FR002

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 633

10/29/94

LISCO, NE

Time (Lcl) - 0510 MDT

---Basic Information---

Reporting Railroad - UP	Property Losses	Injuries			
Type of Accident - DERAILMENT	Railroad - \$ 1,208,560.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 0.00	Employees 0	0	0	2
Method of Operation - AUTOMATIC BLOCK TRAFFIC CONTROL	Fire - NO	Passengers 0	0	0	0
		Motorist 0	0	0	0
		Other 0	0	0	0

UP - UNION PACIFIC RAILROAD COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - UP	No. Loco. Units - 2	Front End - 2
Type of Train - FREIGHT	No. Cars/Caboose - 113/0	Rear End - 0
Train ID - EXTRA 8686 EAST	End of Train Monitor - MONITOR	Toxicology Performed - YES
Direction - EAST	Length (Feet) - 6180	Radio Communications
Speed (Est.) - 51	Trailing Tons - 14680	Radio Available - YES
Speed (Auth.) - 50	Loco. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - 42/43	

UP - UNION PACIFIC RAILROAD COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLOUDY	Last Departure Point	Involved - NO
Condition of Light - DARK	SOUTH MORELL, NE	Cars Involved - 0
	Destination	Track Information
	NORTH PLATTE, NE	Type/No. of Tracks - MAIN/2
Evacuation - NO		Gradient - DES. 0.47
		Alignment - TANGENT

---Narrative---

UP FREIGHT TRAIN EXTRA 8686 EAST, A LOADED UNIT COAL TRAIN, HAD 43 CARS DERAIL WHILE TRAVELING 51 MPH IN 50 MPH TERRITORY. THE ENGINEER STATED THAT HE WAS MAINTAINING SPEED, IN THROTTLE POSITION 2, WHEN AN UNDESIRABLE EMERGENCY APPLICATION OF THE TRAIN AIR BRAKES OCCURRED. SEVERAL PIECES OF BROKEN RAIL WERE FOUND IN THE AREA OF THE DERAILMENT. POST-ACCIDENT EXAMINATION OF THE RAILS INDICATED THAT ONE OF THE BROKEN PIECES HAD AN INTERNAL TRANSVERSE DEFECT THAT ORIGINATED FROM SURFACE SHELLING ON THE GAGE SIDE OF THE RAIL. THE TRACK HAD BEEN VISUALLY INSPECTED 4 DAYS BEFORE THE ACCIDENT, AND NO DEFECTS WERE NOTED. A TRACK GEOMETRY CAR HAD TESTED THE TRACK 3 MONTHS BEFORE THE ACCIDENT, AND THE DEFECTS WERE NOT DETECTED AT THAT TIME.

BRIEF OF ACCIDENT, continued

File No. - 633

10/29/94

LISCO, NE

Time (Lcl) - 0510 MDT

Occurrence #1 - TRACK COMPONENT SYSTEM/FAILURE/MALFUNCTION
Phase - MAINTAINING SPEED

Finding(s)

1. RAIL, CONTINUOUSLY WELDED - DEFECT, INTERNAL
 2. RAIL, CONTINUOUSLY WELDED - BROKEN
-

Occurrence #2 - DERAILMENT
Phase - MAINTAINING POWER

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
a rail broke under the forces of the moving train due to an undetected transverse defect that originated from surface shelling on the gage side of the rail.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # CHI95FR003

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 634

11/03/94

FORDYCE, AR

Time (Lcl) - 1614 CST

---Basic Information---

Reporting Railroad - SP	Property Losses				Injuries			
Type of Accident - DERAILMENT	Railroad - \$	2,000.00	Employees	Fatal	Serious	Minor	None	
Operating Phase - SWITCHING	Non-Railroad - \$	0.00	Passengers	0	0	0	0	2
Method of Operation - TRAFFIC CONTROL	Fire - NO		Motorist	0	0	0	0	0
TIMETABLE			Other	0	0	0	0	0

SP - SOUTHERN PACIFIC TRANSPORTATION COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - SP	No. Loco. Units - 3	Front End - 1
Type of Train - LOCAL FREIGHT	No. Cars/Caboose - 42/0	Rear End - 2
Train ID - EXTRA 7619 EAST	End of Train Monitor - MONITOR	Toxicology Performed - YES
Direction - EAST	Length (Feet) - 2461	Radio Communications
Speed (Est.) - 9	Trailing Tons - 1881	Radio Available - YES
Speed (Auth.) - 5	Loco. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - 0/1	

SP - SOUTHERN PACIFIC TRANSPORTATION COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - NO
Condition of Light - DAYLIGHT	PINE BLUFF, AR	Cars Involved - 0
	Destination	Track Information
Evacuation - NO	FORDYCE, AR	Type/No. of Tracks - INDUSTRIAL/1
		Gradient - DES. 0.06
		Alignment - CURVE 28 D 25 M

---Narrative---

A SP CONDUCTOR WAS FATALLY INJURED WHEN HE WAS RUN OVER BY THE LEAD CAR OF A CUT OF 27 CARS AS THEY WERE BEING SHOVED AROUND A 28 DEGREE, 25 MINUTE LEFT HAND CURVE. THE CONDUCTOR EITHER FELL OR DISMOUNTED IN THE GAGE OF THE TRACK WHEN THE LEADING END OF THE LEAD CAR DERAILED OVER THE HIGH SIDE RAIL, 264 FEET FROM WHERE HE MOUNTED THE CAR. HE WAS RUN OVER BY THE TRAILING END OF THE SAME CAR. THE AUTHORIZED TRACK SPEED WAS 5 MPH. THE EVENT RECORDER INDICATED THAT THE TRAIN'S SPEED HAD ATTAINED 9 MPH. INVESTIGATION REVEALED THAT THE DISTANCE TO SHOVE THE CARS WAS NOT COMMUNICATED TO THE ENGINEER BY THE CONDUCTOR WHEN THEY BEGAN THE SHOVING MOVEMENT. THE MOVEMENT WAS STOPPED BY A BY-STANDER WHO WITNESSED THE ACCIDENT. THE DERAILMENT OCCURRED IN AN AREA OF THE CURVED TRACK WHERE THE ALIGNMENT WAS NOT IN COMPLIANCE WITH TRACK MAINTENANCE STANDARDS.

BRIEF OF ACCIDENT, continued

File No. - 634

11/03/94

FORDYCE, AR

Time (Lcl) - 1614 CST

Occurrence #1 - DERAILMENT
Phase - SHOVING CARS

Finding(s)

1. ALIGNMENT - IRREGULAR
 2. CROSS ELEVATION - IRREGULAR
 3. INADEQUATE INSPECTION - MAINTENANCE OF WAY INSPECTOR
 4. INADEQUATE SUPERVISION - ROADMASTER
 5. SPEED - EXCEEDED - ROAD FREIGHT ENGINEER/MOTORMAN (local and way freight)
 6. RADIO RULES - NOT COMPLIED - ROAD FREIGHT ENGINEER/MOTORMAN (local and way freight)
 7. RADIO RULES - NOT COMPLIED - ROAD FREIGHT CONDUCTOR (local and way freight)
 8. SLIPPED/FELL - ROAD FREIGHT CONDUCTOR (local and way freight)
-

Occurrence #2 - FATALITY, EMPLOYEE
Phase - SHOVING CARS

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the conductor slipped or fell from the car and was run over by it when it derailed due to excessive speed and the irregular track alignment in the sharp curve.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # CHI95FR004

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 635

11/04/94

DEWEY, SD

Time (Lcl) - 2255 MST

---Basic Information---

Reporting Railroad - BN	Property Losses	Injuries			
Type of Accident - DERAILMENT	Railroad - \$ 2,016,342.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 0.00	Employees 0	0	0	2
Method of Operation - TRAFFIC CONTROL	Fire - NO	Passengers 0	0	0	0
TIMETABLE		Motorist 0	0	0	0
		Other 0	0	0	0

BN - BURLINGTON NORTHERN RAILROAD COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - BN	No. Loco. Units - 5	Front End - 2
Type of Train - FREIGHT	No. Cars/Caboose - 117/0	Rear End - 0
Train ID - EXTRA 5580 EAST	End of Train Monitor - MONITOR	Toxicology Performed - YES
Direction - EAST	Length (Feet) - 6542	Radio Communications
Speed (Est.) - 42	Trailing Tons - 14859	Radio Available - YES
Speed (Auth.) - 50	Loco. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - 20/30	

BN - BURLINGTON NORTHERN RAILROAD COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLOUDY	Last Departure Point	Involved - NO
Condition of Light - DARK	GILLETTE, WY	Cars Involved - 0
	Destination	Track Information
	EDGEMONT, SD	Type/No. of Tracks - MAIN/1
Evacuation - NO		Gradient - DES. 0.75
		Alignment - TANGENT

---Narrative---

BN FREIGHT TRAIN EXTRA 5580 EAST HAD 30 CARS DERAIL WHILE MOVING AT 42 MPH IN 50 MPH TERRITORY. A WHEEL HAD BROKEN ON THE 76TH CAR AND IT DERAILED. THE DERAILED WHEEL MOVED ALONG WITHOUT INCIDENT FOR A MILE, AT WHICH POINT THE OTHER CARS DERAILED. METALLURGICAL EXAMINATION OF THE BROKEN WHEEL REVEALED THAT IT MET INDUSTRY SPECIFICATIONS, AND HAD NO GROSS CASTING DEFECTS. HOWEVER, IT HAD A MINUTE CASTING DEFECT IN THE RIM THAT WAS UNDETECTABLE WITH ULTRASONIC EQUIPMENT. HIGH CYCLE FATIGUE CRACKS DEVELOPED FROM THIS DEFECT OVER TIME AND EVENTUALLY CULMINATED IN THE CATASTROPHIC FAILURE OF THE WHEEL. THE CREW HAD INSPECTED THE TRAIN ON 2 OCCASIONS PRIOR TO THE DERAILMENT, BUT DID NOT OBSERVE ANY CRACKS IN THE WHEEL.

BRIEF OF ACCIDENT, continued

File No. - 635

11/04/94

DEWEY, SD

Time (Lcl) - 2255 MST

Occurrence #1 - TRAIN COMPONENT SYSTEM/FAILURE/MALFUNCTION
Phase - MAINTAINING SPEED

Finding(s)

1. WHEEL(S) - DEFECT, INTERNAL
 2. RIM - BROKEN
 3. WHEEL(S) - BROKEN
-

Occurrence #2 - DERAILMENT
Phase - MAINTAINING SPEED

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
a wheel broke due to high cycle fatigue cracks that developed around a minute internal defect and enlarged until the rim broke.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # CHI95FR005A

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 636

11/11/94

LEBO, KS

Time (Lcl) - 1525 CST

---Basic Information---

Reporting Railroad - ATSF	Property Losses	Injuries			
Type of Accident - COLLISION, SIDE	Railroad - \$ 1,097,600.00	Fatal	Serious	Minor	None
Operating Phase - EN POUTE	Non-Railroad - \$ 0.00	Employees 0	0	2	0
Method of Operation - TRAFFIC CONTROL	Fire - NO	Passengers 0	0	0	0
TIMETABLE		Motorist 0	0	0	0
		Other 0	0	0	3

ATSF - ATCHISON, TOPEKA AND SANTA FE RAILWAY COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - ATSF	No. Loco. Units - 2	Front End - 2
Type of Train - FREIGHT	No. Cars/Caboose - 61/0	Rear End - 0
Train ID - EXTRA 156 WEST	End of Train Monitor - MONITOR	Toxicology Performed - YES
Direction - WEST	Length (Feet) - 5349	Radio Communications
Speed (Est.) - 49	Trailing Tons - 4539	Radio Available - YES
Speed (Auth.) - 0	Loco. Destroy/Derailed - 0/2	Operational - YES
	Cars Destroy/Derailed - 0/1	

ATSF - ATCHISON, TOPEKA AND SANTA FE RAILWAY COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - NO
Condition of Light - DAYLIGHT	KANSAS CITY, KS	Cars Involved - 0
	Destination	Track Information
Evacuation - NO	WELLINGTON, KS	Type/No. of Tracks - MAIN/2
		Gradient - LEVEL
		Alignment - TANGENT

---Narrative---

ATSF FREIGHT TRAIN EXTRA 156 WEST COLLIDED INTO THE SIDE OF ATSF FREIGHT TRAIN EXTRA 9554 EAST WHILE TRAVELING 49 MPH WHEN IT SHOULD HAVE BEEN STOPPED. 156 WAS CROSSING FROM THE NORTH MAIN TRACK TO THE SOUTH MAIN TRACK AT A CROSSOVER CONTROL POINT. THE CREW OF 156 STATED THAT THE APPROACH SIGNAL FOR THE CONTROL POINT WAS DISPLAYING A CLEAR INDICATION, AND THE ABSOLUTE SIGNAL WAS DISPLAYING A STOP INDICATION. SIGNAL TESTS CONDUCTED BY THE FRA AFTER THE ACCIDENT INDICATED THAT THE SIGNAL SYSTEM WAS OPERATING AS DESIGNED, AND THE APPROACH SIGNAL WAS DISPLAYING AN APPROACH ASPECT WHEN THE TRAIN PASSED IT. AN APPROACH SIGNAL REQUIRES THE TRAIN TO BE PREPARED TO STOP AT THE NEXT SIGNAL NOT EXCEEDING 40 MPH. THE ENGINEER STATED THAT HE INITIATED AN EMERGENCY BRAKE APPLICATION WHEN HE OBSERVED THE STOP SIGNAL AT LEBO, BUT IT WAS TOO LATE TO AVOID THE COLLISION.

BRIEF OF ACCIDENT, continued

File No. - 636

11/11/94

LEBO, KS

Time (Lcl) - 1525 CST

Occurrence #1 - COLLISION, SIDE
Phase - STOPPING

Finding(s)

1. TRAFFIC CONTROL SIGNAL - NOT COMPLIED - ENTIRE TRAIN CREW
 2. INATTENTIVE - ROAD FREIGHT ENGINEER/MOTORMAN (through freight)
-

Occurrence #2 - DERAILMENT
Phase - STOPPING

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the failure of the crew of Extra 156 West to control the speed of their train in compliance with signal indications.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # CHI95FR005B

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 636

11/11/94

LEBO, KS

Time (Lcl) - 1525 CST

---Basic Information---

Reporting Railroad - ATSF	Property Losses		Injuries			
Type of Accident - COLLISION, SIDE	Railroad - \$ 1,097,600.00	Employees	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 0.00	Passengers	0	0	0	3
Method of Operation - TRAFFIC CONTROL	Fire - NO	Motorist	0	0	0	0
TIMETABLE		Other	0	0	2	0

ATSF - ATCHISON, TOPEKA AND SANTA FE RAILWAY COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - ATSF	No. Loco. Units - 4	Front End - 3
Type of Train - FREIGHT	No. Cars/Caboose - 110/0	Rear End - 0
Train ID - EXTRA 9445 EAST	End of Train Monitor - MONITOR	Toxicology Performed - YES
Direction - EAST	Length (Feet) - 6750	Radio Communications
Speed (Est.) - 38	Trailing Tons - 7002	Radio Available - YES
Speed (Auth.) - 40	Loco. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - 13/13	

ATSF - ATCHISON, TOPEKA AND SANTA FE RAILWAY COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - NO
Condition of Light - DAYLIGHT	WELLINGTON, KS	Cars Involved - 0
	Destination	Track Information
Evacuation - NO	KANSAS CITY, KS	Type/No. of Tracks - MAIN/2
		Gradient - LEVEL
		Alignment - TANGENT

---Narrative---

ATSF FREIGHT TRAIN EXTRA 156 WEST COLLIDED INTO THE SIDE OF ATSF FREIGHT TRAIN EXTRA 9554 EAST WHILE TRAVELING 49 MPH WHEN IT SHOULD HAVE BEEN STOPPED. 156 WAS CROSSING FROM THE NORTH MAIN TRACK TO THE SOUTH MAIN TRACK AT A CROSSOVER CONTROL POINT. THE CREW OF 156 STATED THAT THE APPROACH SIGNAL FOR THE CONTROL POINT WAS DISPLAYING A CLEAR INDICATION, AND THE ABSOLUTE SIGNAL WAS DISPLAYING A STOP INDICATION. SIGNAL TESTS CONDUCTED BY THE FRA AFTER THE ACCIDENT INDICATED THAT THE SIGNAL SYSTEM WAS OPERATING AS DESIGNED, AND THE APPROACH SIGNAL WAS DISPLAYING AN APPROACH ASPECT WHEN THE TRAIN PASSED IT. AN APPROACH SIGNAL REQUIRES THE TRAIN TO BE PREPARED TO STOP AT THE NEXT SIGNAL NOT EXCEEDING 40 MPH. THE ENGINEER STATED THAT HE INITIATED AN EMERGENCY BRAKE APPLICATION WHEN HE OBSERVED THE STOP SIGNAL AT LEBO, BUT IT WAS TOO LATE TO AVOID THE COLLISION.

BRIEF OF ACCIDENT, continued

File No. - 636

11/11/94

LEBO, KS

Time (Lcl) - 1525 CST

Occurrence #1 - COLLISION, SIDE
Phase - MAINTAINING SPEED

Finding(s)

1. TRAFFIC CONTROL SIGNAL - NOT COMPLIED - CREW MEMBER OF OTHER TRAIN
 2. INATTENTIVE - CREW MEMBER OF OTHER TRAIN
-

Occurrence #2 - DERAILMENT
Phase - MAINTAINING SPEED

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the failure of the crew of Extra 156 West to control the speed of their train in compliance with signal indications.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # ATL95FR004

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 637

11/15/94

GANG MILLS, NY

Time (Lcl) - 0935 EST

---Basic Information---

Reporting Railroad - CR	Property Losses			Injuries			
Type of Accident - EMPLOYEE FATALITY	Railroad - \$	0.00	Employees	Fatal	Serious	Minor	None
Operating Phase - SWITCHING	Non-Railroad - \$	0.00	Passengers	0	0	0	0
Method of Operation - YARD RULES	Fire - NO		Motorist	0	0	0	0
TIMETABLE			Other	0	0	0	0

CR - CONSOLIDATED RAIL CORPORATION

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - CR	No. Loco. Units - 2	Front End - 2
Type of Train - YARD	No. Cars/Caboose - 2/0	Rear End - 1
Train ID - WACG-30	End of Train Monitor - NO	Toxicology Performed - YES
Direction - WEST	Length (Feet) - 290	Radio Communications
Speed (Est.) - 8	Trailing Tons - 400	Radio Available - YES
Speed (Auth.) - 0	Loco. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - N/A	

CR - CONSOLIDATED RAIL CORPORATION

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLOUDY	Last Departure Point	Involved - NO
Condition of Light - DAYLIGHT	PAINTED POST, NY	Cars Involved - 0
	Destination	Track Information
Evacuation - NO	GANG MILL YARD, NY	Type/No. of Tracks - YARD/9
		Gradient - DES. 0.40
		Alignment - TANGENT

---Narrative---

A CONRAIL TRAINMAN WAS FATALLY INJURED WHILE SWITCHING CARS IN GANG MILLS YARD. THE 3 PERSON CREW HAD BEEN SWITCHING FOR ABOUT 10 MINUTES IN THE 9 TRACK INDUSTRIAL YARD. THE 2 UNIT LOCOMOTIVE CONSIST WAS PROCEEDING WEST ON THE YARD LEAD TO COUPLE TO 2 CARS ON TRACK 9. THE CONDUCTOR HAD BEEN RIDING ON THE EAST END OF THE CONSIST, BUT DISMOUNTED AT NO. 7 SWITCH. THE ENGINEER SAID HE EXPECTED THE TRAINMAN TO BE STANDING AT THE EAST END OF TRACK 9 TO MAKE THE COUPLING, BUT COULD NOT SEE THE CARS UNTIL HE STRUCK THEM AT ABOUT 8 MPH. THE CONDUCTOR FOUND THE FATALLY INJURED TRAINMAN LAYING UNDER THE WEST WHEELS OF THE SECOND CAR IN THE TRACK. THE ENGINEER HAD RECEIVED A HAND SIGNAL TO BACK UP FROM THE CONDUCTOR. WHEN THE CONDUCTOR DISMOUNTED, THE ENGINEER CONTINUED TO PROCEED, ALTHOUGH HE COULD NOT SEE THE TRACK AHEAD, BECAUSE HE WAS OPERATING FROM THE EAST UNIT AND THE CURVATURE OF THE TRACK.

BRIEF OF ACCIDENT, continued

File No. - 637

11/15/94

GANG MILLS, NY

Time (Lcl) - 0935 EST

Occurrence #1 - FATALITY, EMPLOYEE
Phase - SHOVING CARS

Finding(s)

1. RESTRICTED SPEED - NOT COMPLIED - YARD ENGINEER/MOTORMAN
 2. INFORMATION UNCLEAR - ENTIRE TRAIN CREW
-

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the engineer proceeding into track 9 when he could not observe the track ahead and with no one controlling the movement.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20591

NTSB # LAX95FR003

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 638

11/22/94

TENNESSEE PASS, CO

Time (Lcl) - 0245 MST

---Basic Information---

Reporting Railroad - SP	Property Losses	Injuries			
Type of Accident - DERAILMENT	Railroad - \$ 1,268,000.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 0.00	Employees 0	1	0	1
Method of Operation - AUTOMATIC BLOCK TRAFFIC CONTROL	Fire - NO	Passengers 0	0	0	0
		Motorist 0	0	0	0
		Other 0	0	0	0

SP - SOUTHERN PACIFIC TRANSPORTATION COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - SP	No. Loco. Units - 4	Front End - 2
Type of Train - FREIGHT	No. Cars/Caboose - 54/0	Rear End - 0
Train ID - EXTRA 5369 WEST	End of Train Monitor - MONITOR	Toxicology Performed - YES
Direction - WEST	Length (Feet) - 2817	Radio Communications
Speed (Est.) - 65	Trailing Tons - 7069	Radio Available - YES
Speed (Auth.) - 15	Loco. Destroy/Derailed - 3/3	Operational - YES
	Cars Destroy/Derailed - 51/51	

SP - SOUTHERN PACIFIC TRANSPORTATION COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - NO
Condition of Light - DAWN	PUEBLO, CO	Cars Involved - 0
	Destination	Track Information
Evacuation - NO	GENEVA, UT	Type/No. of Tracks - MAIN/1
		Gradient - DES. 3.00
		Alignment - CURVE 10 D 0 M

---Narrative---

SP FREIGHT TRAIN EXTRA 5369 WEST HAD 3 LOCOMOTIVE UNITS AND 51 CARS DERAIL AFTER RUNNING AWAY DOWNGRADE AT 65 MPH ON 15 MPH TRACK. THE CONDUCTOR SUSTAINED SERIOUS INJURIES. THE TRAIN HAD JUST GONE OVER TENNESSEE PASS AT AN ALTITUDE OF 11,311 FEET AND THE AMBIENT TEMPERATURE WAS 15 DEGREES F. THE ENGINEER HAD REPORTED AIR BRAKE PIPE LEAKAGE AS HIS TRAIN ASCENDED THE OTHER SIDE OF THE PASS EARLIER. THE TRAIN WAS INSPECTED AT TENNESSEE PASS BUT THE SOURCE OF THE LEAKAGE WAS NOT DISCOVERED AND 5369 CONTINUED. THIS BRAKE PIPE LEAKAGE PREVENTED SUFFICIENT BRAKING FORCES TO SLOW THE TRAIN ON THE DOWNGRADE. THE RATE OF BRAKE PIPE LEAKAGE IS OFTEN INCREASED BY COLD TEMPERATURES. INVESTIGATION REVEALED THE SP OPERATING RULES AND DID NOT GIVE CLEAR INSTRUCTIONS FOR THESE SITUATIONS.

BRIEF OF ACCIDENT, continued

File No. - 638

11/22/94

TENNESSEE PASS, CO

Time (Lcl) - 0245 MST

Occurrence #1 - DERAILMENT
Phase - MAINTAINING SPEED

Finding(s)

1. BRAKES - LEAK
 2. GENERAL ORDERS - DISREGARDED - ROAD FREIGHT ENGINEER/MOTORMAN (local and way freight)
-

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
insufficient available train braking forces which resulted from temperature induced air brake leakage throughout the train and the failure of the carrier to have clear operating procedures for this situation.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # LAX95FR004

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 639

12/04/94

FORT MORGAN, CO

Time (Lcl) - 1820 MST

---Basic Information---

Reporting Railroad - BN	Property Losses	Injuries			
Type of Accident - HIGHWAY CROSSING	Railroad - \$ 500.00	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 0.00	Employees 0	0	0	2
Method of Operation - TRAFFIC CONTROL	Fire - NO	Passengers 0	0	0	0
TIMETABLE		Motorist 4	0	0	0
		Other 0	0	0	0

BN - BURLINGTON NORTHERN RAILROAD COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - BN	No. Loco. Units - 4	Front End - 2
Type of Train - FREIGHT	No. Cars/Caboose - 111/0	Rear End - 0
Train ID - EXTRA 9209 EAST	End of Train Monitor - MONITOR	Toxicology Performed - NO
Direction - EAST	Length (Feet) - 5883	Radio Communications
Speed (Est.) - 60	Trailing Tons - 2886	Radio Available - YES
Speed (Auth.) - 60	Loco. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - N/A	

BN - BURLINGTON NORTHERN RAILROAD COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - NO
Condition of Light - DARK	DENVER, CO	Cars Involved - 0
	Destination	Track Information
Evacuation - NO	STERLING, CO	Type/No. of Tracks - MAIN/2
		Gradient - DES. 0.30
		Alignment - TANGENT

---Narrative---

BN FREIGHT TRAIN EXTRA 9209 EAST, MOVING 60 MPH ON 60 MPH TRACK, STRUCK AN AUTO AT A GRADE CROSSING, FATALLY INJURING THE VEHICLE DRIVER AND 3 PASSENGERS. THE ENGINEER WAS BLOWING THE HORN AND RINGING THE LOCOMOTIVE BELL AS THE TRAIN APPROACHED THE CROSSING. THE ENGINEER OBSERVED 2 VEHICLES APPROACHING THE CROSSING FROM THE SOUTH SIDE. THE SECOND VEHICLE STOPPED FOR THE CROSSING, BUT THE FIRST ONE CONTINUED ONTO THE CROSSING. THE ENGINEER CONTINUED TO BLOW THE LOCOMOTIVE HORN, TRYING TO ATTRACT THE ATTENTION OF THE VEHICLE DRIVER. THE ENGINEER MADE AN EMERGENCY BRAKE APPLICATION WHEN HE REALIZED THE TRAIN WAS GOING TO STRIKE THE VEHICLE. THE DRIVER OF THE VEHICLE MADE NO EFFORT TO STOP BEFORE DRIVING IN FRONT OF THE TRAIN. CROSSING WARNING DEVICES INCLUDED CROSSBUCKS AND STOP SIGNS.

BRIEF OF ACCIDENT, continued

File No. - 639

12/04/94

FORT MORGAN, CO

Time (Lcl) - 1820 MST

Occurrence #1 - COLLISION WITH OBJECT
Phase - MAINTAINING SPEED

Finding(s)

1. OBJECT ON TRACK - VEHICLE
 2. GRADE CROSSING WARNING DEVICE, PASSIVE - DISREGARDED - DRIVER OF VEHICLE
 3. INATTENTIVE - DRIVER OF VEHICLE
-

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the failure of the vehicle driver to stop at the grade crossing.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # ATL95FR005

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 640

12/06/94

CAMPBELL HALL, NY

Time (Lcl) - 0252 EST

---Basic Information---

Reporting Railroad - CR	Property Losses		Injuries			
Type of Accident - COLLISION, HEAD-ON	Railroad - \$ 75,000.00	Employees	Fatal	Serious	Minor	None
Operating Phase - SWITCHING	Non-Railroad - \$ 0.00	Passengers	1	0	0	2
Method of Operation - YARD RULES	Fire - NO	Motorist	0	0	0	0
TIMETABLE		Other	0	0	0	0

CR - CONSOLIDATED RAIL CORPORATION

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - CR	No. Loco. Units - 2	Front End - 2
Type of Train - LOCAL FREIGHT	No. Cars/Caboose - 4/1	Rear End - 1
Train ID - EXTRA 3382 WEST	End of Train Monitor - MARKER	Toxicology Performed - YES
Direction - WEST	Length (Feet) - 490	Radio Communications
Speed (Est.) - 19	Trailing Tons - 300	Radio Available - YES
Speed (Auth.) - 15	Loco. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - 0/2	

CR - CONSOLIDATED RAIL CORPORATION

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - NO
Condition of Light - DARK	CAMPBELL HALL YARD, NY	Cars Involved - 0
	Destination	Track Information
Evacuation - NO	CAMPBELL HALL YARD, NY	Type/No. of Tracks - SIDING/5
		Gradient - ASC. 0.09
		Alignment - CURVE 1 D 30 M

---Narrative---

A CONRAIL CONDUCTOR/TRAINEE WAS FATALLY INJURED ON A CABOOSE WHEN THE TRAIN WAS BACKING INTO A YARD AND COLLIDED WITH LOCOMOTIVES STORED ON THE ENGINE STORAGE TRACK. THE TRAIN HAD RETURNED TO THE YARD AFTER COMPLETING SWITCHING OPERATIONS ON THE MAIN LINE AND WAS GRANTED PERMISSION TO BACK INTO THE YARD. THE CONDUCTOR/TRAINEE NOTIFIED THE ENGINEER THAT THE DISPATCHER HAD DISPLAYED THE SIGNAL FOR A WESTBOUND MOVE AND HE COULD START BACKING THE TRAIN. THE TRAIN HAD TRAVELLED ONE-QUARTER OF A MILE AND WAS MOVING 19 MPH WHEN THE CONDUCTOR/TRAINEE CALLED THE ENGINEER ON THE RADIO TO STOP. THE ENGINEER IMMEDIATELY PLACED THE TRAIN BRAKES IN EMERGENCY AND ALMOST SIMULTANEOUSLY THE COLLISION OCCURRED. THE CONDUCTOR, WHO WAS RESPONSIBLE FOR SUPERVISING THE TRAINEE, WAS RIDING IN THE LEAD LOCOMOTIVE AND WAS ENGAGED IN COMPLETING HIS PAPER WORK. VISIBILITY WAS RESTRICTED DUE TO DARKNESS.

BRIEF OF ACCIDENT, continued

File No. - 640

12/06/94

CAMPBELL HALL, NY

Time (Lcl) - 0252 EST

Occurrence #1 - FATALITY, EMPLOYEE
Phase - SHOVING CARS

Finding(s)

1. OPERATING RULES - NOT COMPLIED - YARD CONDUCTOR/YARD FOREMAN
 2. SWITCHING RULES - NOT COMPLIED - YARD CONDUCTOR/YARD FOREMAN
 3. SWITCHING RULES - NOT COMPLIED - BRAKEMAN
 4. SAFETY RULES - NOT COMPLIED - BRAKEMAN
 5. INADEQUATE SURVEILLANCE OF OPERATION - CONDUCTOR
 6. LIGHT CONDITION - DARK NIGHT
-

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the failure of the conductor/trainee to be alert during the backing movement and the failure of the conductor to properly supervise the conductor/trainee.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # CHI95FR006

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 641

12/08/94

LASALLE, IL

Time (Lcl) - 0615 CST

---Basic Information---

Reporting Railroad - CSX	Property Losses		Injuries			
Type of Accident - DERAILMENT	Railroad - \$ 430,876.00	Employees	Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 160,471.00	Passengers	0	0	0	2
Method of Operation - TIMETABLE	Fire - NO	Motorist	0	0	0	0
RADIO		Other	0	0	0	0

CSX - CSX TRANSPORTATION

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - IAIS	No. Loco. Units - 5	Front End - 2
Type of Train - FREIGHT	No. Cars/Caboose - 107/0	Rear End - 0
Train ID - EXTRA 402 EAST	End of Train Monitor - MONITOR	Toxicology Performed - YES
Direction - EAST	Length (Feet) - 7450	Radio Communications
Speed (Est.) - 30	Trailing Tons - 9731	Radio Available - YES
Speed (Auth.) - 40	Loco. Destroy/Derailed - 0/3	Operational - YES
	Cars Destroy/Derailed - 12/26	

IAIS - IOWA INTERSTATE RAILROAD

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLEAR	Last Departure Point	Involved - NO
Condition of Light - DAWN	IOWA CITY, IA	Cars Involved - 0
	Destination	Track Information
Evacuation - NO	ROCKDALE, IL	Type/No. of Tracks - MAIN/2
		Gradient - ASC. 0.38
		Alignment - TANGENT

---Narrative---

IAIS FREIGHT TRAIN EXTRA 402 EAST HAD 3 LOCOMOTIVE UNITS AND 26 CARS DERAIL WHILE MOVING 30 MPH ON 40 MPH TRACK. THE TRAIN WAS TRAVELING THROUGH A SERIES OF SWITCHES WHEN IT DERAILED AT A FACING POINT SWITCH. THE 3RD AND 4TH LOCOMOTIVE UNITS DERAILED FIRST. ABOUT 2,100 GALLONS OF DIESEL FUEL SPILLED FROM A RUPTURED FUEL TANK ON THE 4TH LOCOMOTIVE UNIT, NEAR A PARK AREA AND WATERWAY. A BROKEN SWITCH HEAD ROD WITH EVIDENCE OF AN OLD FRACTURE WAS FOUND IN THE SWITCH AT THE POINT OF DERAILMENT. THE FRACTURE DEVELOPED AS A RESULT OF BENDING FATIGUE AT THE ROLT HOLE CONNECTION TO THE SWITCH POINT CLIP. THE BROKEN HEAD ROD ALLOWED THE SWITCH POINT TO OPEN UNDER THE MOVEMENT OF THE TRAIN.

BRIEF OF ACCIDENT, continued

File No. - 641

12/08/94

LASALLE, IL

Time (Lcl) - 0615 CST

Occurrence #1 - TRACK COMPONENT SYSTEM/FAILURE/MALFUNCTION
Phase - INCREASING POWER

Finding(s)

1. HEAD ROD - FATIGUED
 2. HEAD ROD - BROKEN
 3. SWITCH POINT(S) - NOT SECURED
 4. SWITCH POINT(S) - OPEN
-

Occurrence #2 - DERAILMENT
Phase - INCREASING POWER

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the switch point opened under the dynamic forces of the moving train when the switch head rod broke due to bending fatigue at a bolt hole.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # ATL95FR006A

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 643

12/23/94

BRONX, NY

Time (Lcl) - 1621 EST

---Basic Information---

Reporting Railroad - MNCW	Property Losses		Injuries			
Type of Accident - COLLISION, SIDE	Railroad - \$ 200,000.00		Fatal	Serious	Minor	None
Operating Phase - EN ROUTE	Non-Railroad - \$ 0.00		0	0	3	0
Method of Operation - CAB SIGNALS	Fire - NO		0	0	0	0
			0	0	0	284
			0	0	0	0

MNCW - METRO NORTH COMMUTER RAILROAD COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - MNCW	No. Loco. Units - 4	Front End - 2
Type of Train - COMMUTER	No. Cars/Caboose - N/A	Rear End - 1
Train ID - 2740	End of Train Monitor - MARKER	Toxicology Performed - YES
Direction - SOUTH	Length (Feet) - 280	
Speed (Est.) - 30	Trailing Tons - 250	Radio Communications
Speed (Auth.) - 30	Loco. Destroy/Derailed - N/A	Radio Available - YES
	Cars Destroy/Derailed - N/A	Operational - YES

MNCW - METRO NORTH COMMUTER RAILROAD COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLOUDY	Last Departure Point	Involved - NO
Condition of Light - DUSK	CROTON HARMON YARD, NY	Cars Involved - 0
	Destination	Track Information
	GRAND CENTRAL STA, NY	Type/No. of Tracks - MAIN/3
Evacuation - NO		Gradient - LEVEL
		Alignment - CURVE 3 D 30 M

---Narrative---

METRO NORTH COMMUTER TRAIN NO. 2740, MOVING 30 MPH ON 30 MPH TRACK, SIDESWIPED STANDING METRO NORTH COMMUTER TRAIN NO. 770 AT THE MARBLE HILL STATION. TRAIN 2740 WAS TRAVELING THROUGH AN INTERLOCKING TO RUN AROUND THE STANDING TRAIN ON TRACK 2. 740 WAS OPERATING ON A PROCEED INDICATION DISPLAYED ON THE SOUTH BOUND HOME INTERLOCKING SIGNAL. ON APRIL 12, 1993, A PLANNED INSTALLATION OF NEW SWITCHES COMMENCED ON TRACK 2 AT THIS SITE. LATER THE SAME DAY, THE SIGNAL DEPT. WAS CALLED OUT TO CORRECT A SIGNAL MALFUNCTION THERE. A MODIFICATION WAS MADE TO THE CIRCUITRY TO PROVIDE TRAIN CONTROL OPERATIONS DURING CONSTRUCTION. THE CIRCUIT MODIFICATION ALLOWED A ROUTE TO BE ESTABLISHED AND A CLEAR SIGNAL TO BE DISPLAYED. FOUR MONTHS LATER, THE CONSTRUCTION WAS COMPLETED, BUT THE CIRCUIT MODIFICATION REMAINED IN PLACE. THE MODIFICATION REMAINED IN PLACE TILL DECEMBER 23, 1994, WHEN THIS ACCIDENT OCCURRED.

BRIEF OF ACCIDENT, continued

File No. - 643

12/23/94

BRONX, NY

Time (Lcl) - 1621 EST

**Occurrence #1 - MISCELLANEOUS/OTHER
Phase - DECELERATING**

Finding(s)

- 1. INTERLOCKING - IMPROPER**
 - 2. INTERLOCKING RULES - NOT COMPLIED - SIGNALMAN/SIGNAL MAINTAINER**
 - 3. INATTENTIVE - SIGNALMAN/SIGNAL MAINTAINER**
 - 4. INADEQUATE SURVEILLANCE OF OPERATION - COMPANY OPERATOR/MGMT**
 - 5. HOME SIGNAL - IMPROPERLY DISPLAYED**
 - 6. EQUIPMENT REPAIR - IMPROPER - SIGNALMAN/SIGNAL MAINTAINER**
 - 7. RELAY - IMPROPERLY PLACED**
-

**Occurrence #2 - COLLISION, SIDE
Phase - DECELERATING**

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the failure of the signal department to restore the design circuitry of the interlocking switches after construction was completed, which allowed a route to be established and a clear signal to be displayed while train 770 was obstructing the route to be travelled.

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C. 20594

NTSB # ATL95FR006B

BRIEF OF ACCIDENT

RUNDATE: 05/15/97

File No. - 643

12/23/94

BRONX, NY

Time (Lcl) - 1621 EST

---Basic Information---

Reporting Railroad - MNCW	Property Losses		Injuries			
Type of Accident - COLLISION, SIDE	Railroad - \$ 450,000.00	Employees	Fatal	Serious	Minor	None
Operating Phase - STANDING	Non-Railroad - \$ 0.00	Passengers	0	0	0	4
Method of Operation - CAB SIGNALS	Fire - NO	Motorist	0	0	0	280
AUTOMATIC BLOCK		Other	0	0	3	0

MNCW - METRO NORTH COMMUTER RAILROAD COMPANY

---Railroad/Personnel Information---

Train Data	Train Consist/Damage	Crew Information
Railroad - MNCW	No. Loco. Units - 8	Front End - 1
Type of Train - COMMUTER	No. Cars/Caboose - N/A	Rear End - 3
Train ID - 770	End of Train Monitor - MARKER	Toxicology Performed - YES
Direction - SOUTH	Length (Feet) - 560	Radio Communications
Speed (Est.) - 0	Trailing Tons - 320	Radio Available - YES
Speed (Auth.) - 30	Loco. Destroy/Derailed - N/A	Operational - YES
	Cars Destroy/Derailed - N/A	

MNCW - METRO NORTH COMMUTER RAILROAD COMPANY

---Environment/Operations Information---

Weather Data	Itinerary	Hazardous Materials
Weather Condition - CLOUDY	Last Departure Point	Involved - NO
Condition of Light - DUSK	CROTON HARMON YARD, NY	Cars Involved - 0
	Destination	Track Information
	GRAND CENTRAL STA, NY	Type/No. of Tracks - MAIN/3
Evacuation - NO		Gradient - LEVEL
		Alignment - TANGENT

---Narrative---

METRO NORTH COMMUTER TRAIN NO. 2740, MOVING 30 MPH ON 30 MPH TRACK, SIDESWIPED STANDING METRO NORTH COMMUTER TRAIN NO. 770 AT THE MARBLE HILL STATION. TRAIN 2740 WAS TRAVELING THROUGH AN INTERLOCKING TO RUN AROUND THE STANDING TRAIN ON TRACK 2. 740 WAS OPERATING ON A PROCEED INDICATION DISPLAYED ON THE SOUTH BOUND HOME INTERLOCKING SIGNAL. ON APRIL 12, 1993, A PLANNED INSTALLATION OF NEW SWITCHES COMMENCED ON TRACK 2 AT THIS SITE. LATER THE SAME DAY, THE SIGNAL DEPT. WAS CALLED OUT TO CORRECT A SIGNAL MALFUNCTION THERE. A MODIFICATION WAS MADE TO THE CIRCUITRY TO PROVIDE TRAIN CONTROL OPERATIONS DURING CONSTRUCTION. THE CIRCUIT MODIFICATION ALLOWED A ROUTE TO BE ESTABLISHED AND A CLEAR SIGNAL TO BE DISPLAYED. FOUR MONTHS LATER, THE CONSTRUCTION WAS COMPLETED, BUT THE CIRCUIT MODIFICATION REMAINED IN PLACE. THE MODIFICATION REMAINED IN PLACE TILL DECEMBER 23, 1994, WHEN THIS ACCIDENT OCCURRED.

BRIEF OF ACCIDENT. continued

File No. - 643

12/23/94

BRONX, NY

Time (Lcl) - 1621 EST

Occurrence #1 - COLLISION, RAKING
Phase - STANDING

---Probable Cause---

The National Transportation Safety Board determines that the probable Cause(s) of this accident was:
the failure of the signal department to restore the design circuitry of the interlocking switches after construction was completed, which allowed a route to be established and a clear signal to be displayed while train 770 was obstructing the route to be travelled.