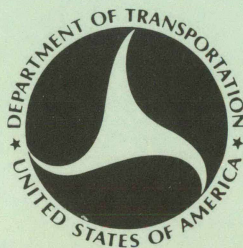


U. S. DEPARTMENT OF TRANSPORTATION  
FEDERAL RAILROAD ADMINISTRATION  
OFFICE OF SAFETY



SUMMARY  
OF  
ACCIDENTS INVESTIGATED  
BY THE  
FEDERAL RAILROAD ADMINISTRATION

OCTOBER 1, 1976  
THROUGH  
DECEMBER 31, 1976



APRIL 1978

## FOREWORD

During the first three months of Fiscal Year 1977, (October 1, 1976 - December 31, 1976) the Federal Railroad Administration investigated and determined the apparent causes of 34 railroad accidents.

The summary of Accident Investigations is intended to provide only the essential information necessary for the reader to ascertain the following: (a) the type of railroad operation involved in each of the 34 accidents investigated by the FRA, (b) the kind of accident investigated, (c) the cost of the accident in terms of casualties and railroad property damage, and (d) the apparent cause.

The estimated monetary costs of damages shown relate to railroad property only. They do not reflect, for example, costs related to clearing a wreck, damage to lading, claims settlement, or damage to privately-owned structures near railroad property.

Abbreviations used in this report and their meanings are as follows:

- ABS -- Automatic Block Signal System
- ATC -- Automatic Train Control
- MBS -- Manual Block Signal System
- MU -- Multiple-Unit Electric Car
- RDC -- Rail-Diesel Car
- TCS -- Traffic Control System
- TO -- Train Orders
- TT -- Time Table
- TT&TO -- Time Table and Train Orders
- CTC -- Centralized Traffic Control

The capital letter abbreviations found in the RAILROAD column on the left side of each page are the DOT Alphabetic Railroad Codes, as found in the FRA Guide for Preparing Accident/Incident Reports, 1977, pages A-1 through A-45.

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Requests for further information or details concerning any of the accidents summarized in this document should be directed to:

Office of Safety, RRS-25  
Federal Railroad Administration  
2100 Second Street, S. W.  
Washington, D. C. 20590

## SYNOPSIS

### 1. Accidents Investigated

(a) Total of All Types 34

### 2. Types of Accidents

(a) Collisions 12  
(b) Derailments\* 19  
(c) Rail-Highway Crossings 3

\*Includes collisions resulting from derailments

### 3. Casualties and Estimated Cost of Damages

(a) Killed 7  
(b) Injured 274  
(c) RR Property Damage \$7,062,950

### 4. Derailment Causes

(a) Broken Rail 4  
(b) Other Track Conditions 6  
(c) Broken Wheel 1  
(d) Loose Wheel 2  
(e) Other Car Conditions 1  
(f) Switch Tampering 1  
(g) Miscellaneous 4

### 5. Collision Causes

(a) Negligence of Members of Train Crews 7  
(b) Maintenance of Way Equipment Occupying Main Track  
Without Adequate Protection 1  
(c) Car Condition 2  
(d) Miscellaneous 2

### 6. Accidents Ratio by Cause or Type

(a) 29.4% were derailments resulting from track conditions.  
(b) 17.7% were derailments and collisions resulting from car conditions.  
(c) 20.6% were derailments and collisions resulting from human factors.  
(d) 8.8% were rail-highway grade crossing accidents.  
(e) 23.5% were collisions, derailments, fires and non-derailments from miscellaneous causes.

### 7. Human Factor Accidents

(a) Rear-end Collision 1  
(b) Side Collisions 2  
(c) Head-end Collisions 2  
(d) Other Collisions 4

RR CODE	DATE	TIME	LOCATION	ACCIDENT TYPE	CASUALTIES		ESTIMATED DAMAGE RAILROAD EQUIPMENT
					KILLED	INJURED	

CR Amtrak	10/06/76	7:29 am	Boston, Massachusetts South Station	Collision (bumper block)	0	8	\$60.00
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1 Method of Operation: Passenger Station, Interlocking, TT&TO.  
 Movements Involved : Passenger Train No. 732, Eastbound, 2 RDC Cars.  
 Equipment Derailed : None

CAUSE: A combination of wet rail, sanders not functioning, and possibly a speed in excess of the 6 mph limit in the station area, which allowed the train to collide with the bumper at the end of the track.

LN	10/05/76	9:00 am	Crawford, Kentucky	Rear-End Collision	0	2	\$26,001.00
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2 Method of Operation: Single Track, TCS  
 Movements Involved : Freight Trains, X1312 South, X1507 South  
 Equipment Derailed : 1 Loco Unit, 3 Cars.

CAUSE: Failure of Engineer to operate the following train in accordance with a restricted proceed signal indication.

CR	10/06/76	5:20 pm	Reading, Pennsylvania	Derailement and Bridge Collapse	0	0	\$40,000.00
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3 Method of Operation: Yard Operation  
 Movements Involved : Switch Engine and Freight Cars.  
 Equipment Derailed : 2 Box Cars, 1 Flat Car.

CAUSE: Bridge collapsed after being struck by a car loaded with auto frames which exceeded the maximum clearance limits during a switching movement.

RR CODE	DATE	TIME	LOCATION	ACCIDENT TYPE	CASUALTIES		ESTIMATED DAMAGE RAILROAD EQUIPMENT
					KILLED	INJURED	

C0	10/18/76	5:00 am	Clifford, Michigan	Collision	Ø	Ø	\$1,496,690.00
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4 Method of Operation: Single-Track Main Line, MBS, TT&TO.  
 Movements Involved : Freight Train PH 42 East, 3 Loco Units, 99 Cars.  
 Equipment Derailed : 3 Locos, 10 Cars.

CAUSE: Vandalism - Vandals damaged a switch which caused the train to run into a siding and strike cars standing on the siding.

BN	10/18/76	1:20 pm	Chicago, Illinois	Derailment	Ø	50	\$329,301.00
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5 Method of Operation: 4 Track Main Line, TCS.  
 Movements Involved : Passenger Train, Amtrak No. 6, 2 Loco Units, 11 Cars.  
 Equipment Derailed : 8 Cars.

CAUSE: Failure of a bolt on the lead truck of the fifth car in the train, which permitted the pedestal tie strap to drop and derail the trailing wheel of the lead truck.

NW	10/19/76	8:15 pm	New Haven, Indiana	Head-End Collision	1	3	\$168,067.00
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6 Method of Operation: Single-Track Main Line, ABS, TCS.  
 Movements Involved : Local Freight Train, East, No. 1376, 1 Loco, 12 Cars; Switching Locomotive, 55 Cars.  
 Equipment Derailed : 2 Loco Units, 2 Cars.

CAUSE: Failure to have sufficient air brakes in use throughout the train (No. 1376) to effectively control the speed, and stopping ability, of train. This was a direct result of an improper train brake test after a pick-up of three loaded hopper cars just prior to the accident.

RR CODE	DATE	TIME	LOCATION	ACCIDENT TYPE	CASUALTIES		ESTIMATED DAMAGE RAILROAD EQUIPMENT
					KILLED	INJURED	

MILW	10/21/76	7:40 am	Madison, Wisconsin	Head-On Collision	0	2	\$26,200.00
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7 Method of Operation: Single-Track Main Line, TT&T0.  
 Movements Involved : Freight Train No. 263, and Yard Engine 751.  
 Equipment Derailed : Front Truck of lead Loco Unit on No. 263.

CAUSE: Failure of Train No. 263 to operate within yard limits in accordance with Rule 93, which requires trains to be prepared to stop short of other trains, engines, or obstructions.

UP	10/22/76	3:00 am	Red Desert, Wyoming	Derailment	0	0	(UNK)
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8 Method of Operation: Double-Track Main Line, ABS, TT&T0.  
 Movements Involved : Freight Train, ASPX-21 East, 4 Loco Units, and 116 Cars.  
 Equipment Derailed : 41 Cars.

CAUSE: A piece of timber which fell from a car in the train, which struck a hand-operated switch stand for a facing point switch, causing the switch points to open, derailing the cars.

AMTRAK	10/28/76	12:26 am	Thompsonville, Connecticut	Derailment	0	0	\$30,000.00
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9 Method of Operation: Double-Track Main Line, TT, ABS.  
 Movements Involved : Passenger Train No. 60, North, 2 Locos, 9 Cars.  
 Equipment Derailed : 3 Cars.

CAUSE: A defective rail frog.

RR CODE	DATE	TIME	LOCATION	ACCIDENT TYPE	CASUALTIES		ESTIMATED DAMAGE RAILROAD EQUIPMENT
					KILLED	INJURED	
SCL	11/07/76	10:40 am	Wilson, North Carolina	Side Collision	0	2	\$119,300.00
10	Method of Operation: Double Track Main Line, TCS. Movements Involved : Freight Trains, X1527 North, and X735 South. Equipment Derailed : 3 Loco Units, and 4 Cars.  CAUSE: Failure of engineer on the northbound train (X1527) to reduce train speed at an approach signal, and also failure to stop the train at a "STOP" signal as was required by signal indications.						
FEC	11/08/76	6:30 am	Miami, Florida	Grade Crossing	0	22	\$45.00
11	Method of Operation: Single Track (Under Yard Limit Rules) Movements Involved : Train and Bus. Equipment Derailed : (NIL)  CAUSE: Failure of bus driver to stop at grade crossing.						
MILW	11/14/76	12:40 pm	Malden, Washington	Collision	0	2	\$136,099.00
12	Method of Operation: Single Track Main Line, TT&TO. Movements Involved : Westbound Freight Train, X29. Eastbound Work Train. Equipment Derailed : 1 Caboose.  CAUSE: Failure of work train crew to provide protection for movement of the locomotive and caboose on the main track in accordance with train orders.						

RR CODE	DATE	TIME	LOCATION	ACCIDENT TYPE	CASUALTIES		ESTIMATED DAMAGE RAILROAD EQUIPMENT
					KILLED	INJURED	
SP	11/15/76	1:30 am	Bisbee, Texas	Derailment	Ø	Ø	\$63,800.00
13	Method of Operation: Main Track, TT&TO. Movements Involved : Freight Train Equipment Derailed : 3 Loco Units, 6 Cars  CAUSE: Harmonic roll of car and a low rail joint.						
CNW	11/22/76	11:53 am	Belle Plains, Iowa	Derailment- Side Collision	Ø	Ø	\$489,000.00
14	Method of Operation: Double track, cab-signal system, ATC. Movements Involved : Freight Trains; X6839 East, and X6815 West. Equipment Derailed : 36 Cars.  CAUSE: Sticking brakes on train X6815 West caused a wheel on car L&N 155863 to heat up and slide inward on axle. The car derailed and struck a facing point switch rail. It then moved onto the opposite main track and struck the side of X6839 East.						
ICG AMTRAK	11/25/76	3:50 am	Dyersburg, Tennessee	Derailment	Ø	34	\$235,000.00
15	Method of Operation: Double Track Main Line, ABS. Movements Involved : Passenger Train No. 59 South. Equipment Derailed : 3 Loco Units, 11 Cars.  CAUSE: The train was moving over track that was 18-24 inches out of alignment, as a result of having been struck by an automobile approximately an hour before train No. 59 arrived.						



RR CODE	DATE	TIME	LOCATION	ACCIDENT TYPE	CASUALTIES		ESTIMATED DAMAGE RAILROAD EQUIPMENT
					KILLED	INJURED	
BN	11/26/76	2:55 am	Belt, Montana	Derailment (Tank Car Explosions)	2	12	\$630,058.00
16	<p>Method of Operation: Single Track Main Line, TT&amp;T0.  Movements Involved : Freight Train X5743 East, 5 Loco Units, 121 Cars.  Equipment Derailed : 24 Cars.</p> <p>CAUSE: Failure of a rail under the forward part of the train which caused derailment of the 21st through the 51st cars. The rail failure was caused by undetected multiple transverse fissures.</p>						
CO AMTRAK	11/30/76	1:15 am	Thurmond, West Virginia	Derailment	0	3	\$25,300.00
17	<p>Method of Operation: Single-Track Main Line, TCS.  Movements Involved : Passenger Train No. 51 (AMTRAK)  Equipment Derailed : 5 Cars.</p> <p>CAUSE: Locomotive exerted high lateral forces on the track structure, widened the gage and over turned the high rail on a 4<sup>0</sup> curve.</p>						
CR AMTRAK	12/01/76	5:30 pm	Charlestown, Maryland	Side Collision	0	0	\$22,000.00
18	<p>Method of Operation: Double-track electrified main line, position light signals.  Movements Involved : Freight Train MW-1 South, Passenger Train No. 441 North.  Equipment Derailed : 1 Freight Car; 2 Passenger Cars.</p> <p>CAUSE: A broken wheel on an empty freight car caused it to derail and foul the adjacent track. Passenger train (on adjacent track) struck the derailed car.</p>						

RR CODE	DATE	TIME	LOCATION	ACCIDENT TYPE	CASUALTIES		ESTIMATED DAMAGE RAILROAD EQUIPMENT
					KILLED	INJURED	

MOPAC AMTRAK	12/02/76	1:42 pm	Irondale, Missouri	Grade Crossing	Ø	11	\$75,000.00
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19 Method of Operation: Single Track Main Line, CTC.  
 Movements Involved : Passenger Train, Amtrak No. 22 North.  
 Equipment Derailed : 6 Cars.

CAUSE: A dump truck loaded with 32,000 lbs. of sand struck the side of the first car of the Amtrak Train at a grade crossing.

C0	12/02/76	3:30 pm	Pullman, Michigan	Derailment	Ø	Ø	\$136,250.00
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20 Method of Operation: Single-Track Main Line, CTC.  
 Movements Involved : Freight Train, No. PT-98 East.  
 Equipment Derailed : 26 Cars.

CAUSE: Broken rail on tangent track.

CONRAIL	12/03/76	9:05 am	New York, New York	Derailment	Ø	Ø	\$2,775.00
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21 Method of Operation: Main line, 4-track electrified/3d rail, ABS (bi-directional).  
 Movements Involved : Passenger Train No. 938 South (2 Locos, 7 Cars)  
 Equipment Derailed : 4th through 7th Cars.

CAUSE: Widening of track gauge under train due to rotted and deteriorated ties.

RR CODE	DATE	TIME	LOCATION	ACCIDENT TYPE	CASUALTIES		ESTIMATED DAMAGE RAILROAD EQUIPMENT
					KILLED	INJURED	
SOU	12/06/76	6:50 am	Winston, Virginia	Derailment	0	23	\$62,900.00
22	Method of Operation: Double-Track Main Line, TCS. (Bi-Directional Running) Movements Involved: Passenger Train No. 2 North Equipment Derailed: 7 Cars.  CAUSE: Cracks in the North rail at an insulated joint caused rail to break under the train. The temperature at the time was below freezing, which reduces the tensile strength in steel.						
SLSF	12/07/76	9:15 am	Jonesboro, Arkansas	Collision	0	3	\$49,000.00
23	Method of Operation: Single-Track Main Line, TCS. Movements Involved: Freight Train BTX North, and a cut of 2 Freight Cars. Equipment Derailed: 1 Locomotive Unit.  CAUSE: Failure of an employee to properly secure cars that had been placed on a siding with a slight downgrade, and failure of a derail to prevent their moving onto the main line.						
MKT	12/09/76	6:00 pm	Dallas, Texas	Collision (Runaway Freight Car)	0	2	\$9,089.00
24	Method of Operation: Main Line, within yard limits, ABS, TT&T0. Movements Involved: Switching Movements, Loco. MKT 105, and Loco MKT 22, and Flat Car MKT 650941. Equipment Derailed: Flat Car MKT 650941.  CAUSE: Failure to set the brakes of a car left standing on a decending grade.						

RR CODE	DATE	TIME	LOCATION	ACCIDENT TYPE	CASUALTIES		ESTIMATED DAMAGE RAILROAD EQUIPMENT
					KILLED	INJURED	
CR	12/10/76	8:58 am	Philadelphia, Pennsylvania	Collision with Bumper Post	0	45	None
25	Method of Operation: Passenger Terminal, ABS. Movements Involved : Passenger Train Equipment Derailed : None  CAUSE: Fireman operating train failed to properly control speed of train and, as a result, train struck bumping post at end of station track.						
ICG	12/11/76	2:55 pm	Morganfield, Kentucky	Derailment	0	1	\$13,300.00
26	Method of Operation: Main Line, Single Track, TT&TO. Movements Involved : Freight Train No. 241 South. Equipment Derailed : 7 Cars and Caboose.  CAUSE: Broken Rail.						
SCL	12/13/76	3:23 pm	Aberdeen, North Carolina	Derailment	0	1	\$501,500.00
27	Method of Operation: Main Line, TCS. Movements Involved : Freight Train, No. 290 South. Equipment Derailed : 37 Cars.  CAUSE: A loose wheel on hopper car LN 139300.						

RR CODE	DATE	TIME	LOCATION	ACCIDENT TYPE	CASUALTIES		ESTIMATED DAMAGE RAILROAD EQUIPMENT
					KILLED	INJURED	
CR	12/13/76	3:30 pm	Columbus, Ohio	Side Collision	0	4	\$250,000.00
28	<p>Method of Operation: Interlocking, within yard limits.  Movements Involved : Cab 2X, Caboose, and Freight Train JK01.  Equipment Derailed : 3 Loco Units, 3 MTY Hopper Cars, 1 Caboose.</p> <p>CAUSE: Failure of southbound train (Cab 2X) to stop at an interlocking home signal, which displayed a "STOP" indication.</p>						
ATSF AMTRAK	12/15/76	8:58 am	Marland, Oklahoma	Grade Crossing	3	0	\$504,000.00
29	<p>Method of Operation: Main line, single track, TCS.  Movements Involved : Passenger Train, Amtrak No. 15 West, 2 Loco Units, 9 Cars.  Equipment Derailed : None</p> <p>CAUSE: Failure of a crude oil tank-truck driver to stop his vehicle short of the rail-highway grade crossing, and to remain standing until the train had passed, as is required by State law.  There was dense fog in the vicinity at time of the accident.</p>						
BN AMTRAK	12/16/76	2:45 am	Ralston, Nebraska	Derailment	1	8	\$761,800.00
30	<p>Method of Operation: Main line, single track, TCS.  Movements Involved : Passenger Train No. 6 East, 11 Cars.  Equipment Derailed : 1 Loco Unit, 11 Cars.</p> <p>CAUSE: Excessive lateral forces on track by locomotive while in curve.</p>						

RR CODE	DATE	TIME	LOCATION	ACCIDENT TYPE	CASUALTIES		ESTIMATED DAMAGE RAILROAD EQUIPMENT
					KILLED	INJURED	

SOU	12/17/76	9:45 pm	Burke, Virginia	Derailment	0	0	\$300,000.00
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31 Method of Operation: Double-Track Main Line, CTC.  
 Movements Involved : Freight Train No. 156, North.  
 Equipment Derailed : 28 Cars (14 thru 42).

CAUSE: Broken car wheel on SOU 41308.

CR AMTRAK	12/26/76	7:41 pm	Downingtown, Pa.	Derailment	0	36	\$88,900.00
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32 Method of Operation: Main Line, Electrified, ABS, TT&TO.  
 Movements Involved : Passenger Train No. 441 (Broadway Limited).  
 Equipment Derailed : 5 Cars.

CAUSE: Wide track gauge in vicinity of the heel joint of a switch frog, due to condition of switch ties.  
 The wide gauge permitted the lead wheel of a car to drop inside the north rail.

UP	12/13/76	3:05 pm	Sloan, Nevada	Derailment	0	0	\$300,000.00
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33 Method of Operation: Main Line, Single Track, TCS.  
 Movements Involved : Freight Train, X6902, East.  
 Equipment Derailed : 2 DOT Track-Geometry Cars.

CAUSE: Track-train dynamics resulting from having light weight cars at head end of train.

RR CODE	DATE	TIME	LOCATION	ACCIDENT TYPE	CASUALTIES		ESTIMATED DAMAGE RAILROAD EQUIPMENT
					KILLED	INJURED	

PLE	12/30/76	10:40 pm	McKeesport, Pennsylvania	Collision Run-Away Train	Ø	Ø	\$171,515.00
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34 Method of Operation: Main Line, TCS.  
 Movements Involved : 4 coupled RDC cars, un-manned.  
 Equipment Derailed : 1st and 2nd RDC units.

CAUSE: Vandalism. The cars had been serviced at Glenwood, Pa., and were placed on a siding with motors idling, and hand brakes set. Vandals apparently boarded the cars, released the brakes, started them moving eastward, and then left the cars. The cars moved eastward 9.1 miles and then collided with 3 loaded coal hopper cars that were standing on a siding.

— END —

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL RAILROAD ADMINISTRATION  
Washington, D.C. 20590

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