



U.S. Department
of Transportation
**Federal Railroad
Administration**

Certain Fatalities Investigated By The Federal Railroad Administration Second Quarter 1988

ACCIDENTS REPORTS ACT - 45 USC 41

Section 41

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INTRODUCTION

This report represents the Federal Railroad Administration's findings in its investigation of seven railroad employee fatalities suffered during the second quarter of 1988. Not included are the employee fatalities that occurred as a result of train derailments, collisions, or rail-highway crossing accidents; these are reported in the 1988 Summary of Accidents Investigated by the Federal Railroad Administration.

The purpose of this report is to direct public attention to hazards that exist in the day-to-day operation of railroads, to guide the overall Federal program to promote the safety of railroad employees, and to supply rail management, rail labor, and all other interested parties with information and analysis for use in training and other action to prevent similar accidents.

J. W. Walsh
Associate Administrator
for Safety

CAUSE DIGEST

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SUMMARY OF ACCIDENTS INVESTIGATED
INVOLVING ONE OR MORE FATALITIES

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ACCIDENT INVESTIGATION REPORTS

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REPORT: 8

RAILROAD: Union Pacific Railroad Company (UP)

LOCATION: North Little Rock, Arkansas

DATE, TIME: April 21, 1988, 1:55 p.m.

PROBABLE CAUSE: Failure to properly secure track panels while loading them into gondola car.

A contributing factor was the failure of the supervisor to ensure proper loading procedures were followed.

EMPLOYEE: Occupation Trackman
Age 31 years old
Length of Service 9 years
Last Rules Training None
Last Safety Training April 21, 1988
Last Physical Examination January 9, 1984

Circumstances Prior to the Accident

At 7 a.m. on the day of the accident, a crew consisting of two trackmen and a crane operator went on duty at the Panel Yard, North Little Rock, AR. At about 7:45 a.m., the crew began to load two No. 9 panel turnouts into a gondola car on No. 1 track. Each turnout consisted of a 59-foot-long panel of switch point area, a 39-foot-long panel of frog area, a 39-foot-long track panel, several rails, and additional switch ties.

A Pettibone 50-ton Multicrane, Model 100 MK-4, was positioned parallel to the gondola on the east side, about nine feet from the car and approximately centered. Throughout the remainder of the morning, and continuing after lunch, four of the turnout panels were loaded into the gondola and banded together with a 2-inch steel banding strap. A machine operator, using a forklift, brought the 39-foot track panel to the Multicrane, and the panel was picked up by the Multicrane using a combination of hooks and slings attached to the panel.

One trackman steadied the panel by holding onto a rope attached to the panel while it was raised over the side of the gondola and then lowered into the car. The trackman then went around to the west side of the car. The other trackman got into the car to chain the panel to the previously loaded and banded panels. The

crane operator had retained sufficient tension on the boom cable to hold the panel upright and had "boomed out" sufficiently to hold it against the previously loaded panels.

The Accident

About three minutes after the panel had been lowered into the car, the crane operator, whose view was partially obstructed by the side of the car, heard the trackman working in the car. The crane operator was looking away from the car when he heard a loud "pop". He turned his attention to the car and heard a second "pop" and felt the crane shake. He saw that the panels had fallen toward the crane. He tried to "boom out" to right the load but the car began to roll instead of the load moving. A track foreman arrived and climbed first onto the north end of the car, then the south end. The track foreman set the handbrakes on the car, then had the crane operator "boom out" and raise the track panel, at which time the trackman's body was found in the bottom of the car. The trackman was pronounced dead at the scene from crushing injuries to the head and chest.

The second trackman, who was on a ladder at the west side of the car, had fallen backwards to the ground and reported his back was injured.

Post-accident Investigation

The panels were being loaded into an open gondola, inside length 65 feet 6 inches with sides and ends 5 feet 6 inches deep. Each panel was placed in the car on edge, perpendicular to the bottom of the car. The first panel was to be secured to the west side of the car with a 1/2-inch steel cable around about five of the ties. This cable was to remain in place until the panel is unloaded at destination.

According to the foreman of the work crew, a chain is also supposed to be wrapped around the middle tie and the other end of the chain secured to the outside of the car on the west side with a chain binder. When the second panel is put into place, a second chain is wrapped around that panel and secured to the side of the car and the two panels banded together. When the third panel is loaded, the first chain is removed from the first panel and wrapped around the third panel; the object being that at all times the panels are secured to the west side of the car by one chain and by the cable.

A length of cable was found lying on the ground beside the car. No cable was on the panels in the car. Only one chain was found in the car, threaded through the panels. The panels had been properly banded but one of the bands was broken.

The supervisor of the work crew, a track foreman, saw the car

about 10:30 a.m. after the first panel had been loaded. He noticed there was no cable on the panel but his attention was diverted, and he said nothing to the work crew about it.

Another car, which had been partially loaded the previous day by the same crew, was adjacent to the car in which the accident occurred. A length of cable was found on the ground beside that car, and no cable was on the panels.

The afternoon of the accident there was a sustained wind of 10 mph from the southwest, with gusts to 25 mph. The trackman was wearing a safety hard hat at the time of the accident.

Applicable Rules

The railroad had no published rules, regulations, or instructions regarding the proper loading of these panels.

REPORT: 9

RAILROAD: Union Pacific Railroad Company (UP)

LOCATION: Creston, Wyoming

DATE, TIME: April 22, 1988, 1:10 p.m.

PROBABLE CAUSE: Employee failed to maintain adequate lookout when he alighted from equipment on the main track side.

EMPLOYEE: Occupation Brakeman
Age 59 years
Length of Service 38 years
Last Rules Training. March 3, 1987
Last Safety Training November 20, 1987
Last Physical Examination. October 3, 1986

Circumstances Prior to the Accident

Extra 3561 East

On the day of the accident at 4:35 a.m., a train crew consisting of an engineer, conductor, and two brakemen reported for duty following the required the off-duty periods at Green River, WY. The crew was to operate Union Pacific Extra 3561 East to Rawlins, WY. At 11:45 a.m. the train stalled at milepost 718.25 on the eastbound main track. The train dispatcher instructed the train crew to take the 30 head cars to Creston, milepost 711.0, set them on the center siding, and return for the rest of the train. At 12:50 p.m., after setting off the cars they left Creston with four locomotives on the eastbound main track, traveling westward. The engineer did not change ends but remained on the east locomotive which was now trailing. The conductor and two brakemen were inside the cab of the west locomotive, which was in the lead, for the approximately seven-mile reverse movement.

Employee statements indicate that as the locomotives approached the standing portion of the train, the conductor and one brakeman exited the west locomotive cab. The brakeman stood on the step on the north side of the locomotive, and the conductor stood on the south side. At an estimated distance of two car lengths from the train, the engineer radioed the second brakeman, who remained in the west locomotive, and informed him there was track equipment approaching on the westbound main track. The second brakeman opened the door and told the conductor of the

approaching equipment. The conductor then notified the brakeman on the north side of the locomotive. In a witness interview, the conductor stated that the brakeman acknowledged that he understood.

Maintenance-of-Way Equipment

A track surfacing gang left Creston, milepost 711.0, about 1 p.m., on the westbound main track, with three Plaser tampers and five ballast regulators, to travel to Wamsutter, milepost 724.0, with no work en route. A Plaser tamper, TMT-166, was the leading, or west, machine, and was towing a second tamper. The speed approaching the accident site was estimated at 30 mph. As the track equipment approached the train standing on the eastbound main track, the tamper operator and gang foreman, who were riding in the leading machine, heard a radio message, "track machines heading west on the westbound track." The tamper operator reduced the throttle setting and began sounding the horn before passing the first locomotive.

Description of Accident Area

In the accident area, there are two main tracks designated westbound main track and eastbound main track. Track centers are 13 feet 11 inches apart at the accident site. From the east the track is tangent for one mile, followed by a 1-degree curve left for 2,835 feet to the point of the accident and 250 feet beyond. Sight distance was approximately 500 feet for the tamper operator because of the locomotives standing on the curve to the left.

The grade is descending 0.82 percent westward from milepost 712.0 to the point of the accident. The terrain is high plateau. The sky was overcast with intermittent snow; the temperature was 35° F. The method of operation is by signal indications of an automatic block signal system.

The Accident

As the tamper passed the front of the leading locomotive, the operator and foreman saw the brakeman step off the rear locomotive of the locomotive consist. He took two or three steps toward the westbound main track and walked west on the ends of the crossties on the westbound track nearest the eastbound main track as the tamper approached him from behind. The tamper operator applied the brakes when it became apparent the brakeman was not going to be clear of the tamper. Neither the tamper operator nor the foreman saw the tamper make contact with the brakeman, but saw the body lying between the main tracks as the rear of the machine passed where the brakeman had last been seen.

The Sweetwater County Coroner pronounced the brakeman dead at the scene of the accident.

Post-accident Investigation

Carrier tests of the tamper's brakes and horn indicated they operated properly. Plaser tampers are not equipped with a speed indicator. The tamper being towed, TMT-168, was inoperable and had been attached behind tamper TMT-166 with a tow bar. An air line was connected between the two machines to keep the brakes released on the tamper being towed. The brakes on the towed machine did not apply in conjunction with the operation of the leading tamper brakes. However, the operator said he disconnected the air line at a quick release fitting inside his control compartment following the impact which applied the brakes on the towed machine.

Neither the operator nor the gang foreman saw the tamper make contact with the brakeman because visibility is limited to objects immediately in front of the Plaser tamper as a result of equipment and tamper design. Following impact, the tamper slid westward approximately 1/4 mile before coming to a stop.

None of the train crewmembers saw the tamper strike the brakeman.

Results of toxicological testing of the deceased were negative.

Applicable Rules

Union Pacific Railroad

SAFETY, RADIO AND

GENERAL RULES

K. Employes must expect the movement of trains, engines, cars or other movable equipment at any time, on any track, in either direction.

.

4038. WALKING ON TRACK: Except when necessary in performance of their duties, employes must * * * keep a careful lookout in both directions for moving equipment and must not rely solely on hearing the approach of a train or equipment.

4040. SUFFICIENT DISTANCE: Employes must not cross or step foul of tracks closely in front of or behind moving equipment, and must not cross track close to the end of equipment.

REPORT: 10

RAILROAD: Union Pacific Railroad Company (UP)

LOCATION: Logan, Utah

DATE, TIME: April 23, 1988, 9:45 p.m.

PROBABLE CAUSE: Failure to operate vehicle in a safe manner and conformity with license restrictions.

A possible contributing factor was the section foreman working on a rail-highway grade crossing without adequate protection.

EMPLOYEE: Occupation Section Foreman
 Age 51 years
 Length of Service 14 years
 Last Rules Training February 1987
 Last Safety Training October 1987
 Last Physical Examination September 1987

Circumstances Prior to the Accident

On the day of the accident, after being off duty for approximately 28 hours, the section foreman was called at his home in Ogden, UT, at about 8 p.m., and was instructed to go to Logan, UT, approximately 75 miles, to repair a loose timber plank in a rail-highway grade crossing.

The section foreman, accompanied by his wife, departed by carrier vehicle to the crossing at milepost 22.23. Upon arrival, he parked the vehicle headed south on the painted highway island in the center at the roadway. The island on U.S. Highway 89-91 is level with the road, 14 feet wide, painted yellow with a stripe formation, and separates northbound and southbound vehicular traffic. In the accident area, the highway is constructed of four 12-foot lanes, two bus lanes and an island.

The section foreman began repairing a section of the timber planking at the crossing in the northbound lanes.

The Accident

A 1972 GMC pickup truck was traveling northbound in the outside lane on U.S. Highway 89-91 at approximately 50 mph when the vehicle operator observed the section foreman and his wife on

foot in the same lane about 60 feet ahead on the railroad crossing. The operator applied the brakes and swerved towards the center of the roadway to avoid striking them. The section foreman was struck by the vehicle when he stepped towards the center of the roadway.

The section foreman was transported to Logan Regional Hospital by ambulance where he was pronounced dead on arrival due to injuries sustained in the accident.

Post-accident Investigation

In the accident area, U.S. Highway 89-91 is a north-south highway, and the maximum authorized speed is 55 mph. The terrain is open with unrestricted visibility.

The section foreman was not wearing any reflective clothing. Such clothing was not required by carrier rules. He was dressed in blue jeans, a dark blue tee shirt, and cowboy boots. The employee and his wife were standing on the crossing with one burning fusee between them that was being placed on the roadway at the crossing. According to witnesses, the headlights, four-way flashers, and yellow rotating roof light of the carrier vehicle were on. In addition, a white spotlight was also on and directed toward the area where the foreman was working.

The vehicle operator had a valid Utah operator's license; however, the operator was not wearing eye glasses as required on the operator's license. This failure is not a violation according to Utah law and no charges were filed against the operator. The pickup truck was inspected by Logan city police and no mechanical defects were found.

The vehicle operator declined to be interviewed by Federal Railroad Administration personnel.

Results of toxicological testing of the vehicle operator were negative. There were no toxicological tests performed on the victim.

Applicable Rules

None.

REPORT: 11

RAILROAD: Burlington Northern Railroad Company (BN)

LOCATION: Shelby, Montana

DATE, TIME: May 7, 1988, 6:30 p.m.

PROBABLE CAUSE: The employee failed to observe an approaching train.

A possible contributing factor was the employee's length of time on duty.

EMPLOYEE: Occupation Maintenance-of-Way
Extra Gang Foreman

Age 31 years

Length of Service. 9 years, 8 months

Last Rules Training. February 6, 1986

Last Safety Training Not available

Last Physical Examination. January 7, 1982

Circumstances Prior to the Accident

At 11 p.m. on May 6, 1988, at Spokane, WA, a maintenance-of-way extra gang foreman reported for duty to ride a Burlington Northern eastbound freight train, symbol 01-106-06. The foreman's assignment was to observe and, when necessary, adjust tie downs on mechanized tie gang equipment loaded on flat cars. The train left Spokane at 2:30 a.m. on the day of the accident en route to Saco, MT. The extra gang foreman was riding in the second locomotive. A BN roadmaster was following the train by company vehicle via the highway. At Shelby, MT, 403 miles east of Spokane, the train arrived at 5:50 p.m. on No. 2 main track to set out a portion of the train in the south yard. While the train was stopped, the extra gang foreman and roadmaster tightened the tie downs on the maintenance-of-way equipment.

It was 52° F. with a clear sky and light west wind.

The Accident

After resecuring the equipment, the extra gang foreman proceeded to transfer his personal belongings from the locomotive in which he was riding to the roadmaster's company vehicle located on the north side of the main tracks. He entered the control compartment of the locomotive, got his personal belongings,

descended to the ground facing west on the north side of No. 2 main track, and walked north and west onto No. 1 main track. After walking about 13 feet, the employee was struck from behind and killed by the leading locomotive of a westbound unit grain train, symbol 01-GC2BC-06, at approximately 6:30 p.m.

Post-accident Investigation

There are no sight restrictions in either direction, east or west, for a distance in excess of one mile. The grade approaching the accident area in a westward direction is 0.60 percent descending, but the grade is level at the point of impact. The maximum speed permitted for freight trains on the No. 1 main track is 45 mph. Post-accident investigation revealed the speed of the westbound unit grain train to be 43 mph at the point of impact. The engineer and front brakeman saw the extra gang foreman step off the locomotive and walk onto the No. 1 main track. The engineer made an emergency application of the train air brakes, and the train stopped approximately 3,160 feet west of the point of impact.

At the time of the accident the victim had been on duty 19-1/2 hours.

Results of toxicological testing of the deceased were negative.

Applicable Rules

Burlington Northern Railroad

Safety Rules and General Rules

ON OR ABOUT TRACKS

58. Employees must:

a. Expect the movement of trains, locomotives, cars, or other moveable equipment at any time, on any track, in either direction.

b. Before crossing tracks or stepping out from between equipment, look in both directions for approaching equipment.

REPORT: 12

RAILROAD: Long Island Rail Road (LI)

LOCATION: Jamaica, New York

DATE, TIME: June 10, 1988, 9:40 p.m.

PROBABLE CAUSE: Failure to secure standing equipment against movement by applying a handbrake or chocking of equipment.

A contributing factor was the mechanical failure charging magnet valve which permitted air brakes to unintentionally release.

EMPLOYEE:	Occupation	Road Car Inspector
	Age	37 years
	Length of Service	13 years, 6 months
	Last Rules Training	January 27, 1983
	Last Safety Training	January 27, 1983
	Last Physical Examination	December 15, 1975

Circumstances Prior to the Accident

At 4:30 a.m. on the day of the accident, three road car inspectors went on duty in Johnson Avenue Yard. There are seven stub-ended tracks in the yard running from east to west, and numbered 1 through 7 from north to south. Train access to the yard is from the east end only. Train movements in the yard are controlled by a yardmaster. The yard tracks are tangent, and the grade of the yard tracks is 1.49 percent descending westward.

A yard switching crew consisting of an engineer and a conductor was assigned to assemble a train of eight out-of-service electric multiple-unit locomotives (MUs) on track No. 2 in Johnson Avenue Yard, by 6:50 p.m. The switching crew had assembled and coupled six MUs, LI Nos. 9543, 9544, 9479, 9480, 9903, 9904 on track No. 2. The crew then moved two MUs, LI Nos. 9327 and 9328, from track No. 6 to track No. 2. The last two MUs were not coupled to the six standing MUs on track No. 2 because the yardmaster had advised the crew not to couple due to the fact that the electric portion of the couplers on MU 9327 and MU 9904 were not compatible. According to the switching crew, they left a space of approximately three feet between the standing six MUs and the pair they were operating. The conductor stated that before leaving the pair of MUs on the east end of track No. 2, an

emergency application of the air brakes was made and a handbrake was applied. The switching crew left the equipment at approximately 7 p.m.

At approximately 8:30 p.m., the car inspectors were assigned to prepare the MUs on track No. 2 for movement to the shop at West Side Yard in New York City. In order to do this, they had to manually retract the electric portion of the couplers on MUs 9327 and 9904 and cut out the electro-pneumatic (EP) feature of the air brake system on MUs 9327 and 9328. The EP feature is designed to interface an electronic operating unit with the automatic air brake system. The EP brake may be cut out on each car by moving a cut out cock on the control panel which nullifies it. The automatic air brake system is not nullified and air brake system pressure is still controlled by the position of the master controller at the engineer's operating station. Two of the car inspectors agreed to walk the exterior of the eight car train at ground level while the third car inspector positioned himself in the operating cab of MU 9328 to protect the track and the movement of the train during brake and power testing.

The two car inspectors on the ground began walking westward from the east end of the train with one inspector on the north side of the train, the other on the south side. As they walked, they cut out the EP brakes on MU 9328 and MU 9327. This is done at ground level by changing the position of the cut-out cock that is located under each MU at the B-end. As soon as one of the car inspectors cut out the EP brake on MU 9328, he heard the exhaust of air from the brake system, indicating that the brakes on the MU 9328 had released. The car inspectors remarked to each other that this was an unusual occurrence and should not have happened when the lever was turned. They continued walking, and as they cut out the EP brake on MU 9327, the pair of MUs unexpectedly rolled westward approximately three feet and struck the standing equipment on track No. 2.

Both men proceeded west and met at the west end of MU 9327. They decided that the electric portion of the couplers may have been damaged by the undesired coupling since the inspectors had not yet manually retracted them.

In order to inspect the coupler area for damage, one of the car inspectors entered the operating cab of MU 9327, inserted his key, and energized the master controller. He obtained a brake release and moved the two MUs eastward approximately six feet. He applied the air brakes, released the master controller handle, removed his key and joined the other car inspector at ground level between MU 9904 and MU 9327 for the purpose of inspecting the coupler area of MU 9904.

The Accident

At 9:40 p.m., as the two car inspectors stood on the track between the separated portions of the train, they bent over to inspect the coupler area of MU 9904. While they were doing this, the brakes again released on the pair of MUs to their rear. The pair of MUs quietly rolled westward and struck the two men, resulting in fatal injuries to one, and serious injuries to the other. After being struck, the injured car inspector managed to enter MU 9327 through the northside crew door and call for help by radio.

Post-accident Investigation

Investigation revealed that a mechanically defective charging magnet valve on MU 9327 caused the brakes to spontaneously release on the MU-pair (9327-9328) once the EP brake was cut out. The control magnet valve was defective because dirt in the assembly caused the plunger to stick intermittently. The defective air brake system had been cleaned, repaired, and tested on March 30, 1987. It was determined that the MU-pair would roll westward against the standing train with the pneumatic brakes fully released and no handbrake applied. Handbrakes on both MUs were tested after the accident and were found to be fully functional. Further testing found that if a handbrake had been applied on either MU, it would have prevented the pair of MUs from rolling unintentionally at the time of the accident.

Results of toxicological testing of the deceased were negative.

Applicable Rules

Long Island Rail Road

Safety Rules

Maintenance of Equipment and Stores Employees

Effective 4 - 1 - 83

4114. Working underneath or afoul of cars equipped with roller bearings before blocking or otherwise securing against movement is prohibited.

REPORT: 13

RAILROAD: Southern Railway Company (SOU)

LOCATION: Macon, Georgia

DATE, TIME: June 13, 1988; 1:38 p.m.

PROBABLE CAUSE: Failure of a train crew and a motor vehicle operator to control their movements in an area of close clearance.

A contributing factor was the failure of the crew to warn the vehicle of the approaching train movement.

EMPLOYEE: Occupation. Track Laborer
Age. 55
Length of Service. 21 years
Last Rules Training. February, 1988
Last Safety Training June 6, 1988
Last Physical Examination. . . . April 17, 1967

Circumstances Prior to the Accident

At 8 a.m. on the day of the accident, two maintenance-of-way employees reported for duty at Brosnan Yard, Macon, GA. The two employees were performing their regular assignment of inspecting, lubricating, and adjusting switches. They had just completed adjusting and lubricating the switches on the south end of the engine terminal and were proceeding north in a two-ton flatbed truck, on the road that is between and parallel to forwarding yard track No. 1 and the derrick track on which cars were being stored for repairs. The road is straight and has a few potholes, making it slightly rough, with a clearance of approximately 12 feet 6 inches when cars or equipment occupy both tracks.

A train crew, consisting of an engineer, conductor and a brakeman, reported for duty at 1 p.m., on the day of the accident, assigned to train No. 141 with locomotive Nos. NS 7076, NS 7028 and NS 3316 aligned south to north. The engineer and conductor were in locomotive number NS 7076. The brakeman was on the north end platform of locomotive No. NS 3316 while performing a backup movement northward on receiving yard track No. 1 to couple to their train.

The weather was clear with temperature of 90° F.

The Accident

The flatbed truck was proceeding north on the road between forwarding yard track No. 1 and the derrick track at a speed of between five and ten mph. The three locomotives were proceeding north on forwarding yard track No. 1 at a speed of 19 mph. The locomotives overtook the truck moving on the road to the left or west side of the track.

The truck slowly veered into the side of the lead locomotive, number NS 3316, and was propelled into the cars standing on the derrick track on the left, or west side, of the road.

The brakeman alerted the engineer by radio, who made an emergency stop. The brakeman also radioed to the main tower for emergency help. The Macon-Bibb County Fire Department was called and responded. The driver of the truck was taken by ambulance to Middle Georgia Hospital in Macon. He sustained a broken pelvis and internal injuries. The passenger of the truck was pronounced dead at the scene by the Bibb County Coroner at 1:50 p.m.

Post-accident Investigation

The driver of the truck stated he had neither seen nor heard the locomotives coming. The first indication he had of the approaching locomotives was the vibration of the ground under the truck. He then looked to the right and saw the leading end of the locomotive just before they made contact.

The brakeman on the platform of the lead locomotive first noticed the truck when he was 5 or 6 carlengths away from it. He stated that the bells were ringing on NS 7076, the trailing locomotive in this movement. No headlight was displayed on NS 3316 as it was backing up to couple to the train. According to the brakeman, as they approached, the truck slowly veered toward the forwarding yard track No. 1. Just before contact was made with the truck, the brakeman contacted the engineer by radio and told him to stop. The locomotives stopped within 230 feet.

The clearance between forwarding yard track No. 1 and the derrick track is approximately 12 feet 6 inches when both tracks are occupied. The truck bed measures 10 feet in width. This allowed only 2 feet 6 inches total clearance for the truck between the cars on the derrick track and the locomotives moving on forwarding yard track No. 1. The speed of the locomotive, 19 mph, was confirmed by speed tape and was within the limit for track speed as listed in Coastal Division Timetable No. 2, Special Instructions dated February 15, 1987. The carrier operates in this yard at yard speed which requires also stopping within one-half the range of vision.

Results of toxicology tests were performed on the train crew and the deceased employee. All results were negative.

Applicable Rules

Norfolk Southern Corporation
Operating Rules

17. The headlight must be displayed, burning bright, to the front of every train by day and by night. If the engine is detached, the headlight must be displayed in the direction of movement.

105. Except where movement is governed by signal indication, trains and engines using any track other than a main track must move at Yard Speed, not exceeding 15 MPH unless a different speed is specified.

Yard Speed---A speed that will permit stopping within one-half the range of vision.

Norfolk Southern Corporation
Coastal Division Timetable No. 2
February 15, 1987

BETWEEN NORTH MACON AND BRUNSWICK

All trains:

. . .

M.P. 242.0-H (Forwarding Yard - All tracks) . . . 20 mph

.

REPORT: 14

RAILROAD: Burlington Northern Railroad (BN)

LOCATION: Upton, Wyoming

DATE, TIME: June 20, 1988; 6:08 p.m.

PROBABLE CAUSE: Tire failure on a company vehicle.

EMPLOYEE: Occupation Machine Operator

Age 34 years old

Length of Service 12 years

Last Rules Training March 25, 1988

Last Safety Training. unavailable

Last Physical Examination . . May 9, 1986

Circumstances Prior to the Accident

On the day of the accident, a machine operator was assigned to deliver diesel fuel by truck to on-track maintenance-of-way equipment. The employee began work at 8 a.m., fueling tampers and ballast regulators from Dewey to Newcastle, WY. The employee was driving a 1980 International 2-1/2 ton cab-over-engine design truck equipped with both a 2,000 gallon capacity fuel tank and a used locomotive sand tank.

At approximately 6:08 p.m. the westbound BN truck was moving at an estimated speed of 55 mph approaching Upton, WY, on U.S. Highway 16 approximately 30 miles from Newcastle. From the east, the two-lane road curves to the right and the grade is slightly ascending westward.

The temperature was 90° F.

The Accident

Suddenly the left front tire on the BN truck failed. Witnesses stated that they saw pieces of tire separating from the body of the tire. The BN employee lost control of the truck which then swerved into the eastbound lane. The BN fuel truck collided with an eastbound tractor-trailer loaded with 33,000 gallons of crude oil resulting in an explosion and subsequent fire. The employee was killed instantly. The driver of the struck vehicle died 18 hours after the accident from burns received in the accident.

Post-accident Investigation

The BN fuel truck was completely destroyed in the collision and resultant fire, thereby precluding a post-accident inspection by police. Another vehicle ahead of the tractor trailer was damaged by pieces of the BN truck's front tire when it blew. The point of impact between the trucks was five feet from the center line into the eastbound lane.

The Wyoming Highway Patrol did not issue any citations relating to this accident.

Toxicology tests performed by the Wyoming State Laboratory were negative for alcohol; however, the samples were deemed not suitable for drug analysis because of contamination from the accident.

Applicable Rules

None.

