

[FE-06-98](#) (document link)

SUMMARY FOR FE-06-98:
SELECTED AND POSSIBLE CONTRIBUTING FACTORS

SELECTED FACTORS

Railroad: Burlington Northern Santa Fe Corporation

Location: Wright, Wyoming

Region: Region 8

Month: February

Date: 02/18/98

Time: 6:40 a.m., MST

Data for Fatally Injured Employee(s)

Engineer

41 years old

17 years of service

Last rules training: February 1997

Last safety training: June 1997

Data for All Employees (Craft, Positions, Activity)

Craft: Transportation

Positions:

Engineer

Conductor

Van Driver (contract carrier: Powder River Transportation)

BNSF Operator in Gillette

Activity: Crew Transport

SUMMARY FOR FE-06-98 CONTINUED

POSSIBLE CONTRIBUTING FACTORS

EVENT

The Engineer was fatally injured after being ejected from a contracted passenger van which then rolled over him during a highway accident.

PCF No. 1

The van had encountered a section of black ice as the Van Driver was ascending a hill.

PCF No. 2

The Van Driver was driving 55 mph, an “unsafe speed for conditions” according to the Wyoming Highway Patrol. A post-accident inspection revealed that the cruise control switch was in the “On” position.

PCF No. 3

The Engineer was the only occupant of the vehicle who was not wearing his seatbelt at the time of the accident. Shortly after departing the work site, the Engineer had unbuckled his seat belt, and had moved to the rear seat to lie down. This was in non-compliance with the railroad’s safety rules.

REPORT: FE-06-98

RAILROAD: Burlington Northern Santa Fe Corporation (BNSF)

LOCATION: Wright, Wyoming

DATE & TIME: Feb. 18, 1998, 6:40 a.m. MST

PROBABLE CAUSE: The Engineer was ejected from the motor vehicle during a highway accident.

EMPLOYEE:

Occupation:	Engineer
Age:	41 Years
Length of Service:	17 Years
Last Rules Training:	Feb. 6, 1997
Last Safety Training:	June 1997

CIRCUMSTANCES PRIOR TO THE ACCIDENT

Following completion of a required off-duty period, the Engineer went on duty at 9:45 p.m., on February 17, at the yard office in Guernsey, Wyoming. The Engineer was assigned as part of a 2-person train crew comprising an Engineer and a Conductor. The crew was called to operate an empty coal train, Symbol E-MLTBTM0-40, from Guernsey to Black Thunder Mine, a distance of 186 miles. The Engineer, as observed by fellow employees, appeared to be fit for duty.

The train departed Guernsey Yard at 12:50 a.m. and the trip was uneventful until the crew reached Converse Junction, Wyoming, whereupon the crew was relieved by another train crew. The crew was to be transported via highway van to Gillette, Wyoming, a distance of approximately 75 miles. The van departed Converse Junction at approximately 5:45 a.m.

The crew was being transported in a 1995 Dodge Ram 3500, a full size, 11-passenger van owned by a contract carrier (Powder River Transportation). Upon leaving Converse Junction, the Driver was seated in the Driver's seat, the Conductor was seated in the front passenger seat, and the Engineer was seated in the first of three rows of bench seats. All occupants were wearing seat belts at that time. However, shortly after departing Converse Junction, the Engineer unbuckled his seat belt, and moved to the rear seat to lie down.

At the time of the accident, it was dawn, cloudy and 27° F.

THE ACCIDENT

At approximately 6:40 a.m., the Van Driver turned north onto Wyoming State Highway 59 and accelerated to 55 mph. At highway milepost 73.6, one mile south of Wright, Wyoming, the van encountered a section of “black ice” as it was ascending a hill. The van spun counter clockwise approximately 120 degrees and crossed the southbound lane of traffic onto the shoulder of the road, then rolled four times down the roadbed embankment and across a ditch, coming to rest on its wheels.

The Conductor tried to open his door, but it was jammed. He crawled through the van to the back door where he exited through a broken window because the back door was also jammed. He found the Engineer lying face down in the ditch. He examined the Engineer and found no pulse and noticed that the Engineer was not breathing. He immediately returned to the van, retrieved his railroad radio and notified the BNSF Operator in Gillette of the accident and requested an ambulance.

According to the Sheriffs’ Department dispatch log, the ambulance arrived at 6:51 a.m., five minutes after the call was received. EMS personnel immediately attended to the Engineer by performing CPR. At 8:31 a.m., the Coroner arrived at the scene and pronounced the Engineer dead.

The Van Driver and the Conductor were transported via ambulance to Campbell County Memorial Hospital in Gillette. The Conductor was treated for bruises and a laceration over his left eye, which required stitches, and then was released. The Van Driver required a 3-day hospital stay for observation of his injuries.

POST-ACCIDENT INVESTIGATION

Investigation of the accident site revealed the van had rolled four times. This was based on gouge marks created in the dirt by the wheel hubs from the deflated tires. According to markings on the van, after the Engineer’s body was ejected through the Driver’s side passenger window, the van rolled over him.

According to the death certificate, the cause of death was massive head and chest injuries.

Inspection of the maintenance records for the van revealed the van had received regular maintenance and repairs. At the time of the accident, the van had accumulated 324,475 miles.

An inspection of the van revealed the tires were slightly worn, but tire tread depths all exceeded the minimum state requirements. The cruise control switch was in the “On” position. However, the Driver stated he was not using the cruise control at the time.

The seat belts in the rear bench seats were noted as not being used. This information was confirmed by investigating officers first on the scene. All seat belts in the van were tested and appeared to be working properly.

Although the Driver did not come under the U.S. DOT hours of duty regulations (Title 49 Code of Federal Regulations Part 395), a Driver’s hours of duty record was maintained and carried on the

vehicle. According to the record, the Driver had just returned from two rest days and had marked up on the Driver's board, making himself available for duty at 6 a.m. on February 17. He did not go on duty until 5:15 p.m. that same day. During his tour of duty that night and up to the time of the accident, he had accumulated 5 ¼ hours actual driving time during a 13 ¾-hour, on-duty period. Even though not covered by DOT regulations, his on-duty time would have been within the regulation's limitations of 10 hours driving time in a 15-hour, on-duty period. The hours of duty record was not signed and no driver's name was entered on the document.

Weather conditions at the time of the accident were favorable for ice to develop on the roads. The temperature was 27° F, barometric pressure was 29.82 inches and falling, dew point was 26° F, humidity was 96%, and the wind was only 1 mph. The Conductor reported there was a light fog just beginning to burn off and the road was glistening.

According to the accident report submitted by the Wyoming Highway Patrol, in the officer's opinion, "unsafe speed for conditions" was listed as the most apparent human contributing factor.

FRA's post-accident toxicological testing of the deceased was not performed. This accident did not meet 49 CFR Subpart C's post-accident toxicological testing criteria.

APPLICABLE RULES

Burlington Northern Santa Fe Safety Rules and General Responsibilities for All Employees Effective January 31, 1996

50.4.9 Wear seat belts while operating or riding in equipment or vehicles that are equipped with them.