

Federal Railroad Administration Office of Safety Headquarters Assigned Accident Investigation Report HQ-2005-32

Canadian Pacific (CP) Columbus, Wisconsin April 10, 2005

Note that 49 U.S.C. §20903 provides that no part of an accident or incident report made by the Secretary of Transportation/Federal Railroad Administration under 49 U.S.C. §20902 may be used in a civil action for damages resulting from a matter mentioned in the report.

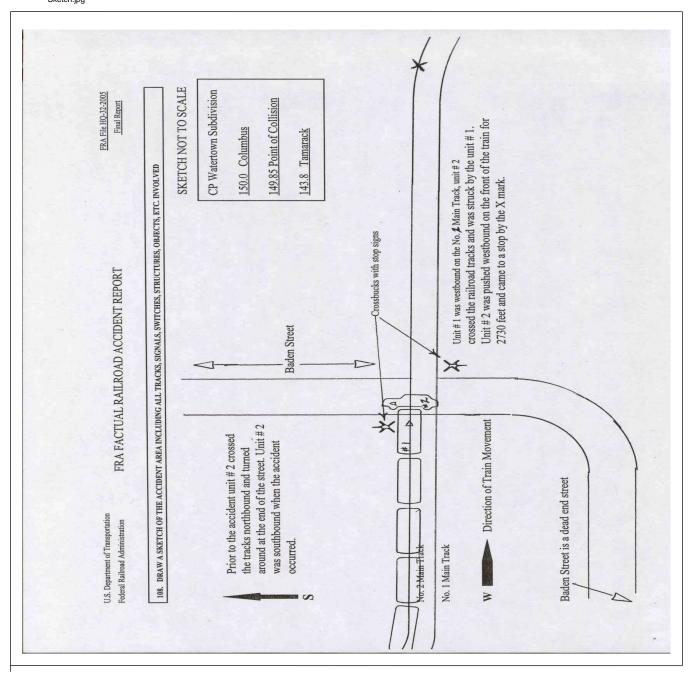
DEPARTMENT OF TRANSPORTATION FEDERAL RAILROAD ADMINISTRATION FRA FACTUAL RAILROAD ACCIDENT REPORT FRA File # HQ-2005-32																			
1.Name of Railroad 0	Tui Tiipiiuoette Code					Railroad Accident/Incident No.													
SOO LINE RAILE			SOO					190793											
2.Name of Railroad (2a.	•					Railroad Accident/Incident												
N/A 3.Name of Railroad F	N/A					25.1	N/A Railroad Accident/Incident No.												
	1					30.1	Kaiiroau <i>F</i>			ent No.									
SOO Line RR Co. 4. U.S. DOT_AAR G	SOO 5. Date of Accident/Incident 6.					6 T	190793												
1. C.B. DOI_11110	3.1	Month Day Year					6. Time of Accident/Incident												
			04 10 2005					10:05:00 🗸 AM 🗌 PM											
7. Type of Accident/Indicent 1. Derailment 4. Side collision (single entry in code box) 2. Head on collision 5. Raking collision									7. Hwy-rail crossing 10. Explosion-detonation 13. Other										
(single entry in co	llision	8. RR grade crossing 11. Fire/violent rupture (describe in narrative) 9. Obstruction 12. Other impacts 07									07								
8. Cars Carrying HAZMAT	9. HAZMAT Cars Damaged/Deraile								11. People Evacuated					12. Division CHICAGO					
13. Nearest City/Town					14. Milepost (to nearest t					State Abbr Code 16			6. County						
		COLU	MBUS	· [49.85		N/A V		WI		D	ODGE			
17. Temperature (F) 18. Visibility (specify if minus) 1. Dawn 65 F 2 Day				3.D	3.Dusk						5.Sleet			1. M	e of Tra	Siding		Code	
65 F 2. Day 21. Track Name/Number				4.L	4.Dark 22. FRA T						6.Snow 1 Annual Track Density			2. Yard 4. Industr				Code	
MAIN TRA					NO. 2	Clas	s (1-9, ∑	(1-9, X) (gross tons in millions) 1. North 3.						h 3. l	East	4			
							OPER	ATI	ING TRA	IN #1				i					
25. Type of Equipme		. Freight tra				. Yard/swi	_	A	. Spec. Mo	W Equip	. Code		as Equip	ment (Code	27. Tı	rain Nun	nber/Symbol	
Consist (single entry) 2. Passenger train 5. Single car 8. Light loco(s). 3. Commuter train 6. Cut of cars 9. Maint./inspect.car										Attended? 1. Yes 2. No 1						199-1	99-10		
28. Speed (recorded					Method(s)				er code(s)	that an	nlv)		1. 103	30a. Rem	notely C	 ontroll			
R - Recorded	speed, ii	u vanaoro)	Code		ATCS	•	. Autom				ial instru	ctions		0 = Not a	•				
E - Estimated		of traffic n. Other than main track ble/train orders o. Positive train control						1 = Remote control portable											
29. Trailing Tons	(arnee to	nnage								o. Posit p. Othe				2 = Rem			ver		
avaluding narrar unita)									(Specify in narrative)						3 = Remote control transmitter - more than one				
e. France & Direct traine control council trained trai											0								
31. Principal Car/Uni	it	a. Initial	and Nu	ımber	h Positi	on in Trair	ı c	Load	ed(yes/no)	'		-		ed for drug	r/alcoho	d nea		Ů	
(1) First involved (derailed, struck, etc)					1			N/A enter the number to the appropriate bo				hat were	•	_		Alcohol 0	Drugs 0		
(2) Causing (if mechanical cause reported) SOO 6033					2				N/A 33. Was this consist tra					sporting passengers? (Y/N)					
34. Locomotive Units a. Head				Mid T	`rain_		ar End		35. Car	s				ade		Empt		G 1	
(1) Total in Train	End (1) Total in Train 2		b. Ma	nual 0	c. Remote	d. Manua	c. Rei		(1) Total in Equipment Cons			Freight 21	b. Pass.	c. Frei	ight d	. Pass.	e. Caboose		
(2) Total Deraile	ed	0		0	0	0	0		(2) Total	Deraile	d		0	0	0		0	0	
36. Equipment Dama			<u> </u>				1 "							39. Cont					
This Consist 0				37. Track, Signal, Way, & Structure Damage 1					38. Primary Cause Code M302						Code N/A				
		Numbe	r of Cr	ew Me	mbers	1			Length of Time on Duty										
40. Engineer/	41. Fir	emen		42. Co	onductors	43. Bra	43. Brakemen		44. Engineer/Operator						45. Conductor				
Operators N/A		0			1		0		Hrs 6 Mi				5		Mi 5				
Casualties to:	46. Railı	road Emplo	yees 4	7. Trai	in Passenge	rs 48. C	48. Other		49. EOT Device?				50. Was EOT Device Properly Armed?				Armed?		
Fatal		0			0		4		1. Yes 2. No 1					1.	Yes	2.	. No	1	
Nonfatal		N/A		0			0		51. Caboose Occupied by Crew? 1. Yes				2. No	No 2					
OPERATING TRAIN #2																			
52. Type of Equipment 1. Freight train 4. Work train 7. Yard/switching A. Spec. MoW Equip. Code 53. Was Equipment Code 54. Train Number/Symbol																			
Consist (single entry) 2. Passeng			assenger train 5. Single car 8. Light ommuter train 6. Cut of cars 9. Maint				co(s).			Attend			ended?	L NT/A		·			
55.0						Maint./in	•				N/A		. Yes	2.110			N/A		
55. Speed (recorded speed, if available) Code R - Recorded ATCS								enter code(s) that apply) atic block m.Special instructions					57a. Remotely Controlled Locomotive?						
E - Estimated 0 MPH N/A a. ATCS g. Autotrain control h. Cur								intic block						0 = Not a remotely controlled 1 = Remote control portable					
				D.	. Auto train	COHUOI II	. Curren	. 01 (i di i i					- 1011	0011	PO			

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DEPARTMEN FEDERAL RA						FRA F	ACTUA	L RAILR	ROAD AC	CIDE	ENT REP	ORT	F	RA File #	HQ-2005	<u>5-32</u>					
56. Trailing Tons (gross tonnage, excluding power units) C. Auto train stop d. Cab e. Traffic f. Interlocking							j. k	Track warrai	o. Positive train control p. Other (Specify in narra Code(s) The control process of training control process of t												
58. Principal Car/Unit a. Initial and Number b. Position in Tra								n c. Load	ded(yes/no)	59. If 1	railroad emp	loyee(s) teste	d for drug								
(1) First involved (derailed, struck, etc)								N/A	enter the number that were positive in Alcohol												
(2) Causing (if mechanical cause reported)				0			0		N/A	60. Was this consist transporting passengers? (Y/N)						N/A					
61. Locomotive Units a. Head End b. Ma					Mid T			ear End	62. Cars		Loade Empty a. Freight b. Pass. c. Freight d. Pass.										
(1) Total in Train			0			0	0 0			Equip	ment Consist		0	0	0	0					
(2) Total Derailed			0	0		0	0	0	(2) Total D	erailed		0	0	0	0	0					
	Equipment Damage This Consist 0					ck, Signal, tructure D		0	65. Primar Code	65. Primary Cause Code N/A 66. Contributing Cause Code					ise	N/A					
			Numbe	r of C	rew Mei	nbers						Length of	ime on D	uty							
67. Engineer/ Operators 0		Firem 0			69. Cor	nductors 0	70. Bi	akemen 0	1	71. Engineer/Operator Hrs 0 Mi 0 Hrs 0						Mi 0					
Casualties to:	73. R	ailroac	d Emplo	vees	74. Trai	n Passenge	rs 75. Ot	her	76. EOT D	evice?			77. Was	e Properly	Armed?						
Fatal			0	7		0	0				2. No	N/A	1.	N/A							
Nonfatal									78. Caboo		upied by Cre				N/A						
Tomuu	0					0	0	1. Yes 2. No													
Highway User Involved										Rail Equipment Involved											
C. Truc	79. Type C. Truck-Trailer. F. Bus J. Other Motor Vehicle										83. Equipment Code 3.Train (standing) 6.Light Loco(s) (moving)										
A. Auto D. Pick					ı E	1.Train(units pulling) 4.Car(s) (moving) 7.Light(s) (standing)															
B. Truck E. Van H. Motorcycle M. Other (spec. in narrative)										2. Fram(units pushing) 3. Car(3) (standing) 8. Other (specify in narrative)											
80. Vehicle Speed 81. Direction geographical) Code (est. MPH at impact) 10 1.North 2.South 3.East 4.West 2										84. Position of Car Unit in Train											
82. Position		1	1.100	rtn 2.50	utn 3.Easi	4. west	85. Circumstance														
	2.Stop	ped on	Crossi	ing 3.M	oving Ove	r Crossing	Code	Rail Equipment Struck Highway User													
4. Trapped	1.Stalled on Crossing 2.Stopped on Crossing 3.Moving Over Crossing 4. Trapped										2. Rail Equipment Struck by Highway User										
86a. Was the hig				• •		lved		Code	86b. Was there a hazardous materials release by												
1. Highway Us	-	_				4. Neither		2	1. High	way Us	er 2. Rail l	Equipment	3. Both	4. Neither	•	4					
86c. State here the	name and	l quan	tity of t	he haz	zardous	materials r	eleased, if	any. N/A													
87. Type of 1. Gates 4. Wig Wags 7. Crossbucks 10. Flagged by crew 88. Signaled Crossing Warning Code 89. Whistle Ban														Code							
Crossing 2.Cantilever FLS 5.Hwy. traffic signals 8.Stop signs								1.Other (spec 2.None	e. in narr.)	2. No											
Code(s)	07	N/	N/A							known	2										
90. Location of W 1. Both Sides	_								Interconnecte gnals	Code 92.	Crossing Illu Lights or Sp		Code								
2. Side of Venicle Hyproden								l. Yes		1											
3. Opposite Side of Vehicle Approach						1		2. No . Unknown			2	2. No 3. Unkn	own	2							
93. Driver's 94. Driver's Gender Code 95. Driver Drove Behind or								rain Code	in Code 96. Driver												
Age	Age 1. Male 2. Female						was Strucl 2. No	k by Second ' 3. Unknown	2. Stopped and then Proceeded 5. Other (specify in							1					
60 2.1 cmale 1							2 3. Did not Stop narrative)								3						
97. Driver Passed Highway Vehi	_		Code	98.				(primary ob		Vac-	iom .	7. 04	manie.			Code					
1. Yes 2. No 3.		,	2			ianent Stru ding Railro			ng Train 5. \ graphy 6. l	-		7. Other (s 3. Not obstru		arrative)		8					
101. Casulties to Highway-Rail							99. Drive	<u> </u>	Code			100. Was D		Code							
Crossing Users			Killed		1 I	njured		1 2.Injured 3.	Uninjured		1	s	1								
4 0						0			Property Damage 8900 103. Total Number of Highway-Rail Crossi (include driver)						ng Users						
104. Locomotive	Anviliary	Liabto	27			-	(est.	dollar dama;		notive :					4	Cal					
1. Yes	. ruminai y		2. No	,				Code 1		notive A Yes	Auxiliary Lig	nts Operatio 2. No	nai (Code 1					
106. Locomotive l	Headlight	Illumi						Code	107. Locomotive Audible Warning Sounded?							Code					
1. Yes 2. No								1		Yes		2. No	·			1					

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108. DRAW A SKETCH OF ACCIDENT AREA INCLUDING ALL TRACKS, SIGNALS, SWITCHES, STRUCTURES, OBJECTS, ETC., INVOLVED. 39-2005
Accident
Sketch.jpg



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DEPARTMENT OF TRANSPORTATION FEDERAL RAILROAD ADMINISTRATION

FRA FACTUAL RAILROAD ACCIDENT REPORT

FRA File # HQ-2005-32

109. SYNOPSIS OF THE ACCIDENT

A westbound Soo Line Railroad (SOO)¹ freight train (SOO 199-10) collided with a motor vehicle at a highway-rail grade crossing on April 10, 2005, at 10:05 a.m CST. The accident occurred at Baden Street, near Columbus, Wisconsin (WI), at Milepost 149.85, on Soo's Watertown Subdivision.

The motor vehicle driver and all three passengers were killed. There were no injuries to the train crew. There was no derailment and Canadian Pacific Railway (CP) did not report any damage to the train.

At the time of the accident, it was daylight, clear and the temperature was 65° F.

The accident was caused by failure of the motor vehicle driver to yield to the train. According to the Dodge County Sheriff's Department, the driver failed to yield the right of way and disregarded a traffic control sign by not stopping for a posted stop sign.

The Soo Line Railroad Company (SOO) was acquired by the Canadian Pacific Railway (CP) and are one railroad. However, the railroad has been segregated by the former railroad company for record keeping.

110. NARRATIVE

The following information was obtained from an investigation that was conducted by the Federal Railroad Administration.

Circumstances Prior to the Accident

The crew of SOO 199-10 included a locomotive engineer and a conductor. They reported for duty at

4 a.m. CST, April 10, 2005, at Bensenville Yard in Bensenville, Illinois. The crew members received more than their statutory off duty period, prior to reporting for duty.

Their assigned freight train consisted of two locomotives, 21 loaded and 18 empty cars of several varieties. It was 3,128 feet long and weighed 2,440 tons. The train was scheduled to travel to Minneapolis, Minnesota (MN). The train received an initial terminal train air brake test and departed Bensenville Yard at 6:35 a.m.

As the westbound train approached the accident area, the locomotive engineer was seated at the controls on the north side of the lead locomotive and the conductor was seated on the south side of the lead locomotive.

In this area of the railroad there are, in succession, a 1 degree curve to the left of about 1,200 feet, followed by a tangent of 900 feet to the point of the accident and 2730 feet beyond. There is a 0.5 percent descending grade approaching the accident site, followed by a 0.45 ascending grade beyond.

The railroad timetable direction of the train was west, the geographic direction was northwest. Timetable directions are used throughout this report.

The Accident

The train was being operated on No. 2 Main Track at 60 miles per hour approaching the accident area. The engineer said he became aware of the impending collision about 200 feet in advance, at which time he initiated an emergency train air brake application. The train had slowed to 59 miles per hour when the collision occurred. The speed was recorded by the event recorder of the controlling locomotive. The maximum authorized speed for this train was 60 MPH, as designated in the current CP Timetable No. 5. The accident occurred at 10:05 a.m.

The motor vehicle was traveling south on Baden Street in Dodge County. According to the locomotive engineer, the driver failed to stop for the stop sign and never looked in the trains direction after the motor vehicle entered the crossing. A report, filed by the Dodge County Sheriff's Department, estimated the driver was operating the vehicle at approximately 10 MPH when the collision occurred.

The train struck the left side of the motor vehicle about midpoint of the left front door. The vehicle was pushed west on the front of the lead locomotive until the train came to a stop about 2,730 feet west of the collision.

After the train stopped, the locomotive engineer stayed on the locomotive to establish radio communication with the train dispatcher. The conductor got off the unit and awaited emergency response personnel.

A Columbus, WI, police officer arrived at the scene at 10:07 a.m. and the Columbus Fire Department arrived at 10:10 a.m. A Columbia County Deputy Sheriff arrived on the scene at 10:10 a.m. and an ambulance arrived at 10:18 a.m. The Dodge County Deputy Sheriff arrived on the scene at 10:41 a.m. The Columbus Police Officer ascertained that the train crew members did not require any medical attention. The Dodge County Deputy Sheriff interviewed both train crew members. The accident occurred in Dodge County, however, the vehicle was pushed west on the railroad tracks into the City of Columbus in Columbia County. The Dodge County

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DEPARTMENT OF TRANSPORTATION FEDERAL RAILROAD ADMINISTRATION

FRA FACTUAL RAILROAD ACCIDENT REPORT

FRA File # HQ-2005-32

Sheriff's Department is handling the accident investigation because the point of collision occurred in Dodge County. The driver and all three passengers of the vehicle were pronounce dead at 11:50 a.m. and the motor vehicle was transported to the Columbus city garage with the victims still inside because there was a large group of onlookers.

A SOO Manager of Field Operations (MFO) was dispatched to the scene from Milwaukee and arrived about 11:55 a.m. He ascertained the condition of the train, no hazardous materials involvement and no damage to the lead locomotive. The MFO discussed the situation with the deputy sheriff and both members of the train crew were given a critical stress incident debriefing. The train crew was transported by cab to Portage, WI, and went off duty. The train was re-crewed and departed the accident scene at 3:15 p.m.

Analysis and Conclusions

The driver was a 60 year old male. The other three passengers of the motor vehicle were adults between the ages of 56 and 59.

The highway-rail grade crossing was equipped with crossbucks and stop signs. There are no advanced warning signs on Baden Street. When traveling northbound, prior to crossing the railroad tracks, the road is marked with a dead end sign. Baden Street, north of the railroad tracks, is the only access for five residences. The approaches to the highway-rail grade crossing are maintained by Dodge County.

The railroad had a whistle post in place approximately 1320 feet east of the crossing. Both train crew members said the locomotive engineer began sounding the whistle when the train neared the whistle post. This was later validated by analysis of the event recorder data.

The lead locomotive was equipped with a headlight, auxiliary lights and an audible warning device required by Federal regulations. The locomotive engineer tested these devices at the accident site in the presence of the deputy sheriff and MFO. All the devices functioned as intended, with one exception, both auxiliary ditch lights were inoperative after the accident. The lights were replaced prior to departing the accident site. The devices were retested in St. Paul, MN, on April 12, 2005, in the presence of a Federal Railroad Administration (FRA) motive power and equipment inspector. The inspection noted one auxiliary ditch light was burned out and the right front handrail was bent. These were the only exceptions noted and all other devices were in compliance with Federal requirements. FRA F6180.96 mechanical inspection report RAL No. 34 is attached.

The locomotive was also equipped with a speed indicator and an event recorder as required. The relevant event recorder data was downloaded and analyzed by the MFO at the accident site. This analysis disclosed that the locomotive engineer was in compliance with all applicable railroad operating and train handling requirements. FRA reviewed the results of this analysis and concurred with the conclusions. FRA F6180.96 event recorder data inspection report PDG No. 57 is attached.

The train crew and a woman who lived in the house on the northeast corner of Baden Street were the only witnesses to the accident and they had no information that could be used to determine why the motor vehicle failed to stop at the crossing.

Probable Cause and Contributing Factors

The motor vehicle apparently had traveled westbound on portions of Highway 16/60 that were closed for road construction. The driver passed two "road closed to local traffic" and "bridge out" signs prior to arriving at the accident site.

The driver of the motor vehicle was apparently attempting to locate a route into Columbus. The bridge over the Crawfish River just west of Baden Street on Highway 16/60 was closed for construction. The driver turned onto a dead end street, driving over the rail crossing once and then trying to go back across the tracks when the accident occurred.

The accident occurred because the driver of the motor vehicle failed to stop at a posted stop sign at the highway-rail grade crossing. The FRA concurs with these findings.

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