## IHIJESTANE COMTDCE COMISSION WASHINGTON

JTVESTJCATION NO. 2695 THE NIESCURI FACIFIC RGTCROAD COIPAYY<br>ROPORT IH E AOSIDENT<br>ZAAR SAGETYAH, OKLA , ON AFRIL 21, 1943

Railroad:

## Date:

Location:
Kind or accident:
Trains involved:
Train numiers:
Encine numbers:
Consist:
Estimeteul speec:
Operabion:
Track:
Yeabiner:
Time:
Casualties:
Cause:

Recommendation:

Missouri Pacific
April 21, 1943
Sageeyain, Okla.
Head-end collision
Pascenger : Freigint
Extra 5511 Nortin : 191
6511 : 2305
6 cars : 12 cars, caboose
$50 \mathrm{~m} . \mathrm{p} . \mathrm{in} \quad: 30 \mathrm{~m} . \mathrm{p} . \mathrm{n}$.
Timetable and train orders
Single; $I^{\circ} 05^{\prime}$ curve; level
Olear
About 4:56 p. m.
3 killec; 125 injured
Accicent caused by failure to ober a meet orcer

That the Missouri Pacific Roilroad Company install on acequate block systern on the line on winicn tinis accident occurred

## IUTERSTATF COMTRCE COMMISSION

## TNVESTIGATICN NO. 2695

IN THE MATTER OF MAKING ACCIDETT INVGSIGATION REPORTS UNDER THE ACCIDENT REPORTS ACT OF MAY 6, 1910.

WLE MISSOURI PACIFIC RAILROAD COMPANY

June 9, 1943.

Accicent near Sageeyan, Okle., or April 21, 1943, crused by failure to obey a neet order.

1
REPORT OF THE COMISSSION

PATTERSON, Comaissjoner:
On April 2l, 1942, there was a head-end collision between a passenger trair and a freignt train on the Missouri Pacific Railroad near Sageeyon, Okla., mici resulted in the cieatin of 3 employees, and the injury of 119 passengers and 6 employees.

IUnder authority of section 17 (2) of the Interstate Conmerce Act the above-entitled proceeding mas referred by the Comiseicr to Comissioner Pattereon for consideration and disposition.
Cof feyville Yard, Kans.
22.64 mi.
Nowata, Okla.
18.08 mi.
Oologah
5.37 mi.
Point of accident
1.74 mi.
Sagee yah
4.66 mi.
Claremore Tower
28.85 ml.
Wagoner
84.20 mi.
Van Buren Yard, Ark.


Inv. No. 2695
Biscourl P. cafic Rill road
S reuyah, okia. harll 21, 1943

## Location of Accident and hetrod of Operation

This accident occurred on that part of the Soutnern Kansas and Central Divisions designated as the vagoner Subdivision and extending betreen Coffeyville Yard, Kans., and Van Buren Yard, Ark., 165.54 miles. In the vicinity of the point of accicent tnis is a single-track line over wich trains are oderated by timetable and train orders. There is no block system in use. At Sageeyan a siding 3,603 feet in lengtin parallels tine main track on the east. The nortn switch of this siding is 781 feet nortin of the station. The accident occurred on the main track et a point 1.59 miles nortin of the nortin siding-switcin. Approaching from the soutin tnere are, in succession, a tangent 2.59 miles in lengtin, a $1^{\circ} 051$ curve to the right 1,303 feet, a tangent 1,534 feet and a $1^{\circ} 05^{\prime}$ curve to the left 655 feet to the point of accident. Apuroacning from tne nortin there is a tangent 3,772 feet in lengti, winicris followed by a $1^{\circ} 05^{\prime}$ curve to the riznt 634 feet to the point of accicent. At the point of accident the grade is level.

Operating rules resd in part as follows:
14. Eneine Wristle Signals.

Fote. - Tine signals prescribed are illustrated by "o" for sinort sounds; "__ for longer sounds. * * *

Sound.
Indication.

*     *         * 

(n) _ A _ A proacning meeting or waiting points. See Rule S-90.

*     *         * 

1G. Communicating Siqnals.
Note.- Tne signals prescribed are illustratod by "o" for sinort sounds; "__ " For longer sounds. $* * *$

Sounc.
Indication.

*     *         * 

(1) $\qquad$ A proacring meeting or waiting ooints. See rule S-so.

S-89 (a). ***
At trein óraer meeting points, the train nolcin? the mein track must ston clear of the switcn used by the train to be met in goine on siding, unless tine train to be met is clear of the main urack and switon is properly lined.

*     *         * 

S-90. On trains equipwed witin communicating signal system, tine conductor must give signal 16 (1) to the engineman after paseiner the last station but not less than one mile rreceding * * * a point winere by train oreer jt is to meet, * * *, an onposins trein. The engineman will imneaíately reply with signal 14 (n). If tne en inemen fails to answer by sienal 14 ( $n$ ), the coricucior must take immediate action to stop the trein.
$* * *$
Siould engineman * * * fail to prepare to stop snort of fouling point, rinen required, t.ie conductor must tare immeisate action to ston une Erain.
204. ***

Thelnemen and firemen and, when practiceble, forward traimmen must read train orders, cneck wita eacn otner and nave a definite and proper unceratending of their requirements. Conductors and, wisen practicable, trainmen, must read train orders, cneck with each otiner and have a definite and sroper understanding of their reauirements.

FORMS OF TRAIN ORDESS.
$* * *$

$$
\mathrm{S}-\mathrm{A}
$$

Fuxing lieeting Points for Opocing Trains.
(1) * * *

No 5 Eng 58 meet Extra 95 nortin at B.

Tralns receiving tinese orders will run with raspect to gacr otner to the designated point and tinere meet in the manner prescribed by tne rules.

*     *         * 

$$
\mathrm{S}-\mathrm{C}
$$

Giving Rigint Over An Opposing Train.

*     *         * 

(3) Extra 77 nortin ins rigint over No 97 Eng 75 F to $A$ and rait et $D$ until 1020 a m * * *

*     * The gecond named train must clear the time specified * * * not less tinan five minutes.
*     *         * 

The maximun autiorized speed for passenger trains is 55 miles per nour and for freignt trains, 50 miles per nour.

## Description of Accident

Passenger Extra 6511 Norta, a nortn-bound passenger train, consisted of engine 6511, one express-refrigerator car, tro Pullman sleeping cars, one baggafe car and two Pullman tourigt cars, in the order named. The first car was of steel-underframe construction and tne remainder were of all-steel construction. At Wagoner, 33.51 miles south of Sageeyan, the crew received a clearance cord and copies of five train orters, of winici one was treir order No. 237 reading in part as follows:

> Pegr Extra 65ll Nortn nas rignt over No l9l Eng $2 z 05$ $* * *$ Waroner to Coffeyville Yard and rait at $* * *$ Oologan until $337 \mathrm{pm} * * *$

Passenjer Extra 6511 הeparted Irom Wagoner at 2:57 p. m., according to the dispatcher's record of movement of trains. At Clexenore Tower, 4.66 miles soutn of Sageeyan and the last open cifice, tine crew receivec a clearance card and conies of train orier vo. 271 reeding in part as follows:

No 191 Eng 2305 Teet Psgr Extra
6511 Norin at Sageeyan * * *

Passencer Extra 6511 departed fron Clamemoro ' Tower at 4:43 p. m., passed the nortn siding-sriton at Sageeyan where it was roquired to wait unless No. 101 was into clear, and winile moving at an estimated speed of 50 miles per nour it collided witinc. 191 at a point 2.59 miles nortn of tine nortn sidingswiton.

No. 191, a south-bound second-class freigint train, consisted of engine 2305, 2 loaded and 10 empty cars and a caboose. At Nowata, 25.19 miles nortn of Sageeyain, the crew received a clearence card and cooies of six train orders, of winich one was train order $\mathbb{N o . ~ 2 3 7 . ~ N o . ~} 191$ denarted from Nowata at 12:56 p. m., according to the dispatcner's record of movement of trains, 2 nours 44 minutes late. At Oologan, 7.11 miles nortin of Sageoyan and tre last open office, the crew received a clearance card and conies of three train ordors, of winich one ras trein order No. 271. Tnis train departed from Oologain at 4:43 p. n., 5 hours 33 minutes late, and wile moving at an estimated speed of 30 miles per nour it collided with Passenger Extra 6511 Nortin.

Fron an engine moving in eitner direction, in tne vicinity of the point of accident, the view of a train approacing from the opositc direction is restricter to a distance of about l,400 fret, becpuse of vegetation adjacent to tne track and track curvacure.

The cneine of each train, the first two oars of Passcnger Extra G5ll and the first, second and seventn cars of lio. 191 trere ciemolished. Tine tinird car of Passenger Extra 6511 was derailed and sligintly damaged. The front truck of the tinird cor oi io. lol was derailed. The eigintin, tentin and eleventin cars were sligitly dameged.

It was clear at the time or tine acciaent, riicn occurres about 4:56 p. m.

The employees killed were tne engineer and the fireman of Passenger Extra 651l, and the fireman of ro. 191. The enployees injured rere cne conductor, tinree brakenen and the engineer oi ${ }^{\top} 0$. 191, and tine front brakeman or Passenger Excra 6511.

During the $3 C-d a y$ oeriod preceding the day of the accider tne averase daily movement in the vicinity of the roint of accicent ras 20.3 trains.

## Discussion

The rules governing operation on this line provide tinat at a meeting point the superior train must stop clear of the switch to be used by the train wnicn is to enter the siding. On passenger trains equipped with a train air-signal the conciuctor must sound tie meeting-point signal on tine train airsignal efter the last station is passed but not less tinan one mile before tne meeting point is reacied. In acdition, the engineer must acknowledge tnis signal by sounding tine proper signal on the engine whistle. If the engineer fails to sound tne proper signal, or fails to prepare to stop tine train sinort of the fouling point, the conductor must take immediste action to stop the train. Enginemen and trainmen must read all train orders affecting the movement of their trains ond have a definite and proper understanding of the requirements of tine orders.

The crew of each train neld copies of train order 170.257 , winch gave Passenger Extra 6511 Nortrigint over No. 191 Wagoner to Coffeyville Yard, and train order No. 27l, winch establisied Sageeyain as the meeting point between Passenger Extra 6511 and No. 191. Passenger Extra 6511 was reauired to stop sinort of the foulinj point of the nortin siding-switcin at Sageeyon unless No. 191 vas into clear on the siding. Passeneer Extra 6511 passed tine nortin siding-eritcin at Sageeyan and collided with No. 191 l. 59 miles nortin of the switcin.

As No. 191 Wha approncing the point where the collision occurred the speed was about 35 miles per nour. The encinemen and the front brakeman rere maintaining a lookout anead. Their view of the track anead was restricted because of vegetation and track curvature. Wnen tine engine reached a point about 1, 400 feet rorth of the point where the accident occurred the engineer saw the engine of Passenger Extra 6511 and immediately moved the brake valve to emergency position. Tine speed of No. 191 wes about 30 miles per nour when the collision occurred.

About 10 minutes before the accident occurred the eneinemen, the front brokeman and the flagman of Passencer Extra 6511 received copies of train order No. 271 from a trein-order deliverydevice as their train passed Claremore Tower, 4.66 miles south of Sageeyan. The front brakeman and tine flagman read the order and understood that their train was required to stop clear of the fouling point of tre nortin siding-switon unless ${ }^{\text {reo }}$. 191 was into clear on the siding. The flagnan said ne sounded the meeting-point signal on tre train air-signal phen ins troin wes about l-l/2 miles soutn of Sageeyan, ari the engine wistlesignal was sounded in acknorleagment. As his train was approacining the siding the speed was about 50 miles per nour. He sew a train on tre siding, but rnas ais train passec the vicinity of the nortin sicine-switcn ne realized tinat the train on the sidin wes not lĩo. 131. Tnen ie became coniused and he took no action to stop nis train. Tne front brakenan said that winen ne detemined that $N 0.191$ was $n o z$ on the siding ne made an effort to anply tiie brakes by opening the conductor's valve, but the
collision occurred before ne hac reacined tne location of ine valve. Tre conductor said ne knew tinat coうies of a train order ned been received at Claremore Torer by tie otner members of nis crew, but ne was engaged in nerforming cleical duties and did not read the order nor nave knowledgo of jus requirements. He was broceeding toward the rear cer of nis irein to confer wita the flagman regarding the train order minen the collision occurred. The brakes mae been tested and nod functioned properly en route, but there was no anplication of tre brakes in the vicinity of Sageeyan prior to the collision. The overator at Claremore Tower said ne saw a member of tine crew on the engine of Passenger Extra 6511 remove a copy of train order No. 271 from the Grain-order delivery-device. Thy tne enginemen feiled to take action to stop tneir train sinort of tine fouling point of the nortn siding-switch coula not be determined, as both of then were killed in the accident.

In tine teritory wnere this accident occurred, trains are operated by timetaile and train orders only. If an adequate block system nad been in use on this line trese trains would not inave been permitted to occupy a block simultaneously, and the accident would not nave occurred. This corrier nas an automatic block-siEnal systern in operation between Greenwood Jot. and tegoner, Okla., 77.82 miles. The nortinern end of tinis system is 33. 51 miles south of Sageeyain.

## Cause

It is found that this accident ras caused by failure to obey a meet order.

## Recommendation

Jt is recommended that the Missouri Pacific Railroad Company install an aciequate block system on tine line on wiricn tnis accident occurred.
Dated at Wasington, D. C., this nintin
cay of June, 1943 .

By the Comrission, Comissioner Patterson.

