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# IFTERSTATE COLLERCE COLLISSION

RUPORT OF THE DIRECTOR OF THU BUREAU OF SAFETY CONCUPNING INVESTIGATION OF AN ACCIUNT WHICH OCCURRUD ON THE INTERNATIONAL-GREAT NORTH HT RAILROAD, MISSOURI PACIFIC LINUS, NEAR PALESTINE, TEX., ON MARCH 2, 1922.

April 11, 1932.

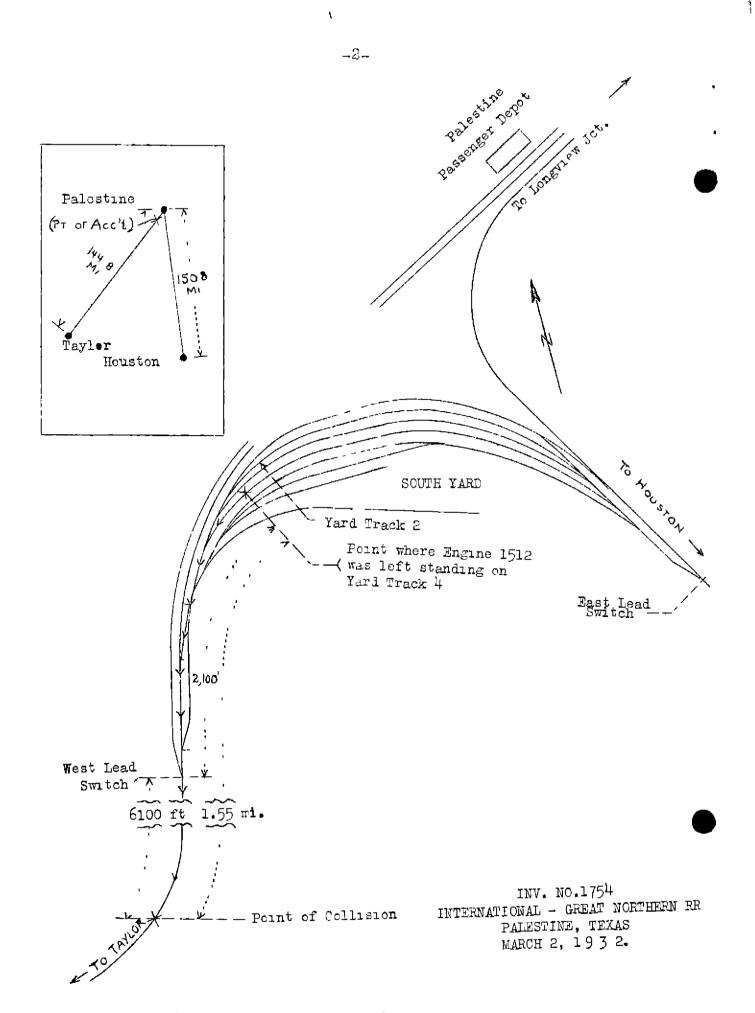
To the Commission:

On March 2, 1903, there was a nead-end collision between a bassenger train and a runaway engine showing two box cars ahead of it on the International-Great Portrern Railroad, Miscorri Pacific Lines, near Palestine, Tax., which resulted in the injury of 8 bassengers, 1 explose and bassageman, 1 mail clerk, 3 employees, and 1 Pullman porter.

## Location and method of operation

This accident occurred on the Taylor District of the San Antonio Division, extending between Taylor and Palestime, Tex., a distance of 141.0 miles, in the vicinity of the point of accident this is a single-track line over which trains are operated by time-table and train orders, no block-signal system being in use. The accident occurred within yard limits, at a point about 6,100 feet south of the west lead switch of South Yard at Palestine, or about 1.55 miles from where the fundation started in the yard, the west lead switch is a trailing-point switch for southbound trains and it is located on the west side of the yard.

Palestine is a terminal for all freight trains, it is the junction of the Trinity District, Palestine Division, with the Taylor District, San Antonio Division, Taylor, Tex., is located southwest of Palestine, while Houston, Tex., is located southwest of Palestine, while Houston, Tex., is located southwest thereof, onglines are handled to and from South Yard by hostlers. Northbound trains from Houston enter South Yard at the east lead switch, and proceed around a long curve to the left, the distance from the east lead switch to the vert lead switch is about 5,600 feet, and the runaway engine started from a point on the curve about 2,100 feet north of the west lead switch. The grade for southbound novements around the curve from the point their the runaway engine started is approximately 1 per cent ascending for a distance of 400 feet and then level a distance of 200 feet, following which it is descending for a distance of 1,500 feet to the



west lead switch and beyond to the point of accident, the maximum descending grade on the main track is 1.10 per cent, while the grade at the point of accident is 0.30 per cent. Approaching the point of accident from the north, beginning at the west lead switch, the track is tangent for a distance of 1,463 feet and then there is a 3° curve to the right 867 feet in length and 2,950 feet of tangent, followed by a 1° curve to the right 1,300 feet in length, the accident occurring on this curve at a point 819 feet from its northern end. Approaching from the south the track is tangent for a distance of 2,500 feet, followed by the curve on which the accident occurred.

It was dark, cloudy and slightly foggy at the time of the accident, which occurred about 4.53 a.s.

### Description

Nortabound freight train extra 1512, consisting of 29 cars and a ceboose, heuled by ergine 1512, of the 2-8-2 type, an oil burner, was in charge of Conductor Chestnam and Engineman Wahlers, it arrived at Palestine from Houston over the Trusty District, Pelestine Division, at 3.05 a.m., and headed in at the east side of South yard on yard track 2 and stopped with the engine in the clear at the west side of the yard. Switch engine 9510, in charge of Engine Foreman Dunaway and Enginemen Hiller, then coupled to engine 1512, proparatory to breaking up the train, and set the engine out on yard track 4, Engineman Wahlers rode chaine 1513 while this move was made, and then got off and left the engine unattended, in accordance with the usual practice, for the hostler to handle to the roundhouse On account of other work, however, the hestler did not attend to engine 1812 at the time it arived. At about 3.15 or 3.20 a.m., switch engine 9010 coupled two box cars shead of ensine 1012, and that engine, with the cars, was last observed by the switch crew stending on yard track 4 at 4.15 e.m. Sometime ofter that it started ahead, procended around the curve and up the 400 fest of approximately 1 per cent ascending (rade, headed out through the west lead statch to the usin track of the Taylor District, then do m the descending grade, and continued thereon at an undetermined rate of speed until it collided with train No. 8 at a point about 1.55 miles from where it started.

Northbound passenger train No. 8 consisted of 2 baggage ' cars, 2 mail cors, 1 coach, 1 chair car and 1 Pullian sleeping cal, in the order named, all of steel construction, hauled by engine 1154, and was in charge of Conductor Brown and Engineman Giddings. This than 1 ft Taylor at 12.30 a.m., according to the train sheet, five minutes late, left Jevett, the last open office, 43.8 miles south of Polestine, at 3.56 a.m., 11 minutes late, and collidee with the box carsbeing shoved ahead of engine 1512 thile traveling at a speed estimated to have been between 30 and 50 miles per hour.

Both engines were bedly damaged and the two box cars being showed ahead of engine 1512 were denolished, while five cars in train No. 8 were slightly damaged. The employees injured were the conductor, engineman and fireman.

# Sum ary of evidence

Engineman Wahlers, of extra 1512, stated that after his engine had been moved over to yard track 4 by the switch ongine he placed the automatic brake valve in lap position and the independent brake valve in full application position, extinguished the headlight, shut off the air pump, cut out the fire, closed the firing and safety valves, placed the power reverse gear lever on center, and opened the cylinder cocks, leaving the engine at 3.12 or 3.15 a.m., at that time the stemm pressure on the engine was 150 pounds. Fireman Neal and gotten off the engine before it was set over to yard track 4. Engineman Wahlers further stated that the air brakes had worked properly en route from Houston to Polestine and no trouble of any kind was experienced with the engine, he did not think it possible that the throttle leaked open, as it worked hard, nor that the coupling of the cars ahead of the ensure, after he had left it, could have caused the throttle to jar open or the engine to reverse itself, and said that had the air brakes leaked off and the engine moved of its own accord it would have rolled in the opposite direction, instead of moving up a 1 per cent grade. There was no requirement about blocking the engine when leaving it unattended under such circumstances.

Engine Foreian Dunavay, of suitch engine 9310, stated that he last observed engine 1512 standing on yard track 4 about 4.15 a.m., at which time the switch engine and crew left that vicinity and proceeded to the station, and neither he nor any other numbers of his crew had occasion to go to the west end of the yard after that time. He

also stated that when the two box cars were coupled to engine 1512 it did not cause that engine to move, as the bra'es on it were applied. It was the practice for all engines to be handled to and from the roundhouse by hostlers, he had seen engines, however, remain in the yard from 1 to 10 hours before bring moved to the roundhouse. When the hostler is not available, and it becomes necessary for the switch engine to set road engines over to other yard tracks out of the way, it is required that a member of the switch crow properly attend to the air brakes, reverse lever and other appurtenances. He said that there was a sag in the yard, the grade being descending from both ends of the yard toward the middle. Statements of Engineman Hiller, Fireman Barinell and Switchmen Kitcher, Pagitt, and Wash, all of switch en\_ine 9310, brought out nothing additional of importance as to what transpired prior to the accident.

Hembers of the crew of train No. 8 ware unaware of anything wrong until just prior to the accident. Fireman Miller was looking anead across the inside of the curve and he saw the reflection from the neadlight of his own engine upon the box cars being showed ahead of engine 1512 when about 8 or 10 car-lengths distant, at which time he estimated the speed of his own train to have been 30 or 35 miles per hour, he inhediately showted a warning of danger to Engineeran Giddings and jumped. There was no light on engine 1512 or on the box cars. Engineman Giddings estimated the speed to have been between 45 and 48 miles per hour when the fireman gave warning of danger, saying that he did not have time to apply the air brakes prior to the accident. Conductor Brown estimated the speed to have been between 45 and 50 miles per hour.

Switch engine 9310 proceeded to the scene of the accident and arrived there about 5.30 or 5.45 a.m. Examination of engine 1512 at that time by Night General Yardmaster King, Engine Foreman Dunaway and Engineman Hiller disclosed that the reverse lever was in full forward motion, the throttle open from three-quarters to full, and the air brake valve in running position, the steam and air had entirely escaped. Night General Yardmaster King further stated that in some instances arriving engines stand in the yard until the air pressure is completely exhausted before the hostler gets around to them, in such cases no provision being made, to his knowledge, to anchor them. There is only one hostler and one helper on this shift and the helper is not permitted to handle engines. Master Mechanic Carter alrived at the scene of the accident about 6 a.m. Test of the throttle on engine 1512 in both open and closed positions to determine whether the latch would nold the lever securely disclosed that with the throttle closed and the latch secured in the quadrant he could not pull the throttle out even by bracing his foot against the boiler head. Master Mechanic Carter was of the opinion that it was practically as safe to leave a road engine standing in the yard in the manner followed in this instance as it was to leave a standing car, with or without air, but not on a grade unless a check was used.

Hostler Phelan stated that it is the practice first to get engines out of the roundhouse for departing trains and then attend to engines of arriving trains that are left standing in the yard. At the time engine 1512 arrived he was busy getting an engine ready for a southbound extra called for 3.20 a.m., while another northbound extra had been called for 4 a.m. As it took all of his time to prepare these engines for the departing trains he did not have time to handle engine 1512 to the roundhouse.

Pat Biggan, 13 years of age, a newspaper delivery boy for the Pelestine Piess, stated that he left the office of the press about 4 a.m. While serving papers in the vicinity of where the engine stood in the yard he noticed steam suddenly exhaust from it and then it started away, and judging from riding in a Ford automobile he thought engine 1512 attained a speed of about 20 to 25 miles per nour. There was no light on the engine, nor did he see anyone around it or any ears coupled ahead of it.

Inspection disclosed that the throttle quadrant and latch on engine 1512 were in first-class condition and the throttle stem could not be moved in any position while the latch was scated in the quadrant; there was no evidence that the throttle was leaking.

#### Conclusions

This accident was caused by engine 1512 running away, apparently due to malicious tampering.

On arrival of extra 1512 at Palestine it headed in on yard track 2, following which the engine was cut off and set out on yard track 4 by a switch engine. Engineman Wahlers accompanied the engine while the move was made, and said he then closed the firing and safety valves, applied the air brakes, placed the power reverse gear on center, opened the cylinder cocks, shut off the air pump,

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and gave the engine other attention required, and got off and left it unattended, as customary, for the hostler to handle to the roundhouse. The angine was last observed standing on yard track 4 with two box cars coupled ahead of it by nembers of the switch crew, at about 4.15 a.m. Sometime afterwards engine 1512 started away, proceeded up 400 foot of approximately 1 per cent ascending grade and out on the main line, and traveled a distance of about 1.55 miles to where it collided with train No. 8. Inspection of ensine 1512 disclosed nothing that would have caused or contributed to the accident, and there was no evidence that the throtale leaked. A number of hoboes were seen in the yard on the night of the accident, however, at the tive of the investigation it had not been determined exactly when or how the endine started, although it was believed that some unauthorized person placed the reverse lever in forward motion, released the air brakes, and opened the throttle.

There is an alrangement in effect at this point whereby the hostler handles all engines to and from the roundhouse. Upon annual of a tiens, provided the hostler is not then available to handle the engine, the ergine erew put out the fire, pull the safety chain, place the reverse lever on center, ap ly the brakes, open the cylinder cocks, etc., and leave the ensure standing in the yard unattended, such as the done on this occasion. The investigation developed that read onfines of arriving trains are left under steam standing in the yard unattended and not otherwise protected for periods renging fro 1 to 10 nours at a time, to be handled subsequently by a hostler. This sets up a potentially dangerous condition. Provision should be made for hendling such engines to the roundhouse promptly or to guard against their move ent either accidentally or by unauthorized persons.

All of the employees involved were experienced men and at the time of the accident none of them had been on duty in violation of any of the provisions of the bours of service law.

Respectfully submitted,

W. P. BORLAND,

Director,