#### INTERSTATE COMMERCE COMMISSION

REPORT OF THE DIRECTOR OF THE BURFAU OF SAFETY IN RE INVESTIGATION OF AN ACCIDENT WHICH COCUPRED ON THE ATLANTIC COAST LINE RAILROAD AT LAKELAND, FLA., ON JUNE 27, 1924.

August 4, 1924.

To the Commission:

On June 27, 1924, there was a collision between a light engine and a yard engine on the Atlantic Joast Line Railroad at Lakeland, Fla,, which resulted in the death of one employee and the injury of one employee.

Location and method of operation.

This accident occurred on that part of the Third Division which extends between Lakeland and Fort Meyers, Fla., a distance of 114 miles. Movements within yard limits are governed by rule to of Sceedal Instructions resuling in part as follows:

"Within yard limits the main track may be used, protecting against third and fourth class and extra trains."

"Third and fourth class and extra trains must move within yard limits prepared to stop unless the main line is seen, or known to be clear."

A bulletin issued by Superintendent Council under date of June 1, 1924, relative to the speed of trains through yards in the Lakeland District, provides in part as follows:

### "LAKELAND YARD'

All trains will reduce speed to ten (10) miles an hour, and approach all cross over tracks prepared to step, expecting to find trains using cross over tracks without protection."

The accident occurred on the main track within yard limits at a point about one-half mile north of the south yard limit board at lakeland. Approaching this point from the north the track is tangent for acout 930 feet followed by a 60 curve to the right, 970 feet in length, following which the track is tangent for several miles. The collision occurred on the curve at a point about 530 feet from its northern end. The grace for southocung trains varies from 1.17 per cent descending to nearly level, being 0.65 per cent at the point of accident. The view was partly

obscured until within approximately 500 feet of the point of accident by buildings, trees and high weeds. The weather was clear at the time of the accident which occurred about 1 p. m.

# Description.

Engine 628, in charge of Conductor Thigpen and Engineman Pollard, left Fort Meyers light, headed north, as an extra, at 7.30 a.m., passed Bartow, the last open office, 13 miles from Lakeland, at 12.33 p.m., and collided with a cut of cars being handled by yard engine 155, while traveling at a speed estimated to have been approximately 15 miles an hour.

Yard engine 155, in charge of Foreman Perkins and Engineman Davis, headed north, was backing south at a speed of about 5 miles an hour, pushing a box car and an oil tank and hauling three gondola cars, when light engine 628 was observed approaching; the yard engine was nearly stopped when the collision occurred.

As a result of the collision the front end of engine 628 was badly damaged, as was the leading car of the cut handled by the yard engine. An air-brake pipe leading from engine 628 to its tender was broken off which caused the air to be drained from the main reservoir and permitted the independent air brake to release after the collision had occurred; the reverse lever being in reverse position and the throttle open, when the brakes released the engine started backward and after gaining considerable momentum ran off the end of a derail track about 500 feet south of the point of accident. The employee killed was the engineman of the light engine.

# Summary of evidence.

Conductor Thigpen of extra 628 said that the speed of the engine approaching the point of collision was about 6 or 8 miles an hour at which time he was sitting on the fireman's seat box; looking across the inside of the curve he saw the cars being pushed by the yard engine which were then not more than 5 car lengths distant and he shouted a warning and jumped. He said the enginemen applied the independent air brake and reversed the engine and that the engine had come to a stop before the collision occurred. Conductor Thigpen further said that under the rules his engine was required to be operated within yard limits at such speed that it could be stopped within range of vision, and he considered this requirement was being complied with. He thought the approaching cars were moving at the rate of about 5 or 6 miles per hour when he first saw them. thought under the rules the switch engine while making this movement should have been protected by flag, but stated

that he did not remember that it had ever been complied with in that way.

Fireman Hardy, of extra 628, said he stood behind the seat box on the left side of the engine and that the speed of the engine was about 7 or 8 miles an hour at the time he saw/out of cars approaching about 8 or 10 car lengths distant. Following the conductor's warning, the engineman applied the air brakes and reversed the engine and he said his engine had come to a stop before the collision occurred. He further said that when the engine started backward after the collision he boarded it and tried to bring it to a stop but was unable to do so and jumped before the engine was derailed. He said that the air brakes seemed to work all right during the trip.

Foreman Perkins of yard engine 155 said he was riding on the second car of the cut on the fireman's side when he saw engine 628 approaching about 10 car lengths distant at a speed of about 10 or 12 miles an hour, at which time his own train was moving at a speed of about 3 or 4 miles an He immediately gave stop signals and said his train Foreman Perkins was stopped before the collision occurred. stated he was familiar with rule 15 but that he did not consider he was required to protect the yard movement he was making by sending out a flag and that the rule governing the speed of trains within yard limits was all the protection required of crews making such movements. He further said that the air brakes were coupled and in use on but two of the five cars being handled by the engine, these being the two cars pushed ahead of the engine, and he did not consider it necessary to have the air brakes coupled on the three rear cars for the reason that he was making industrial track deliveries and he did not consider that the rule requiring air brakes to be coupled applied in making yard movements.

Engineman Davis said he saw engine 628 approaching at a speed of about 10 or 12 miles an hour at about the time he received the stop signals, his train was then moving at a speed of about 4 miles an hour. He said he had previously applied the independent brake coming down the hill; he made an emergency air brake application, bringing the train to a stop within 12 or 15 feet, and was standing when the accident occurred.

Brakeman Lohr said he was riding on top of the box car, which was the leading car, and saw engine 628 when it was about 15 car lengths distant, he estimated its speed at between 15 and 20 miles an hour. He gave stop signals and said his own train came to a stop before the collision occurred. The statements of Brakeman Whisnant and Fireman Allen were also to the effect that their train had come to a stop before the collision occurred.

Round House Foreman Hannah said he arrived at the scene of the accident shortly after its occurrence, and made an inspection of engine 628 and found the throttle closed, the reverse lever in the reverse position, the automatic brake valve in running position and the independent air brake valve in holding position. It later developed that the throttle had been closed after the derailment and before Foreman Hannah made his inspection. Foreman Hannah, Master Mechanic Kennedy and Car Foreman Parker estimated from the damage resulting to the engine and box car that the impact resulted from a speed at the time of the collision of 12 or 15 miles an hour. Various eye witnesses of the accident estimated the speed of the light engine to have been from 12 to 25 miles an hour.

Superintendent Council stated that he did not require strict compliance with time-table rule 15 in Lakeland yard for the reason that he considered the bulletin rule of June 1, 1924, superseded the time-table rule.

#### Conclusions

This accident was caused by failure of extra 628 to be operated under proper control within yard limits, for which Engineman Pollard and Conductor Thigpen are responsible.

The bulletin instructions of June 1 prescribed a maximum speed limit in Lakeland yard of 10 miles per hour. While both crews stated that their trains had stopped before the collision occurred, other evidence brought out in this investigation warrants the conclusion that both trains were moving at the time of the accident, the yard engine very slowly and extra 628 at a rate in excess of the prescribed maximum speed limit. The investigation established the fact that in making the movement during which the accident occurred the yard engine was being operated at a speed well within the prescribed limit, had extra 628 also observed this speed restriction, both trains could have been stopped in time to avert the accident. As the view approaching the point of accident was materially restricted by obstructions inside the curve, the dictates of good judgment as well as r the rules in effect governing the speed of trains in Lakeland yard should have influenced the crew of extra 628 to have their train under complete control so that it could be safely operated through the yard. While there was an ascending grade approaching this point, extra 628 consisted only of a light engine and consequently there was no excuse for making a run for the hill as appeared to be common practice with freight trains entering the yard.

The investigation also disclosed that the switch engine and five cars were operated for a considerable distance over main line track, crossing a number of city streets, and on a grade of more than one per cent, with only a portion of the air brakes, less than the minimum required by law, in service; and it appeared to be the practice to use the air brakes only on cars on the down-grade side of the engine. In view of the nature and extent of main line used it is believed the law requiring power brakes to be used and operated applies to movements of this character. Had the brakes on all cars handled by the switching locomotive been in operation, this train mighthave been stopped in time to have reduced the severity and mitigated the results of the collision.

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 hours of service law.

Respectfully submitted,

W. P. BORLAND.

Director