INTERSTATE COMMERCE COMMISSION WASHINGTON

REPORT NO. 3692

GULF, COLORADO AND SANTA FE RAILWAY COMPANY

IN RE ACCIDENT

NEAR GAINESVILLE, TEX., ON

JUNE 16, 1956

SUMMARY

Date: June 16, 1956

Railroad: Gulf, Colorado and Santa Fe

Location: Gainesville, Tex.

Kind of accident: Collision

Equipment involved: Passenger train : Cut of cars

Train number: 112

Locomotive number: Diesel-electric

units 87 and 81A

Consists: 7 cars ; 20 cars

Estimated speeds: Standing : 18 - 35 m. p. h.

Operation: Signal indications

Track: Single; tangent; 0.82 percent

ascending grade northward

Weather: Clear

Time: 11:55 p. m.

Casualties: 3 injured

Cause: Cut of cars moving out of control on

descending grade as a result of an insufficient number of hand brakes

being applied.

INTERSTATE COMMERCE COMMISSION

REPORT NO. 3692

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

GULF, COLORADO AND SANTA FE RAILWAY COMPANY

July 25, 1956.

Accident near Gainesville, Tex., on June 16, 1956, caused by a cut of cars moving out of control on a descending grade as a result of an insufficient number of hand brakes being applied.

REPORT OF THE COMMISSION

CLARKE, Commissioner:

On June 16, 1956, there was a collision between a passenger train and a cut of cars on the Gulf, Colorado and Santa Fe Railway near Gainesville, Tex., which resulted in the injury of one passenger, one Pullman Company employee, and one train-service employee.

Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Clarke for consideration and disposition.

Location of Accident and Method of Operation

This accident occurred on that part of the Northern Division extending between Cleburne and North Yard, near Gainesville, Tex., 93.8 miles. In the vicinity of the point of accident this is a single-track line, over which trains ale operated by signel indications supplemented by an automatic train-stop system. At M-K-T Crossing, O.1 mile south of North Yard, a single-track line of the Missouri-Kansas-Texas Railroad Company of Texas crosses the tracks of the G.C.& S.F. North of M-K-T Crossing seven auxiliary tracks parallel the main track on the east. These tracks are designated from west to east as tracks Nos. 1 to 7, inclusive. A lead track connects the south ends of tracks Nos. 2 to 7 inclusive, with track No. 1 at a point about 350 feet north of M-K-T Crossing, and track No. 1 extends southward to a point about 3,230 feet south of M-K-T Crossing and connects with the main track at that point. The accident occurred on the main track at a point 91.8 miles north of Cleburne and 1.4 miles south of the station at Gainesville. the south there are, in succession, a tangent 2,740 feet in length, a 1° curve to the right 940 feet, and a tangent 5,198 feet to the point of accident and 1.02 miles northward. the north there are, in succession, a tangent 1.22 miles in length, a 1° curve to the right 1,160 feet, and the tangent on which the accident occurred. Southward from the north switch of track No. 7 via track No. 7, the lead track, track No. 1, and the main track the grade is, successively, 0.37 descending a distance of 4,640 feet, 0.36 percent descending 3,560 feet, 0.14 percent descending 1.02 miles, and 0.82 percent descending 1,482 feet to the point of accident.

Automatic signal 4082, governing north-bound movements on the main track, and semi-automatic signal 154LB, governing south-bound movements from track No. 1 to the main track, are located, respectively, 2,914 feet south and 1.34 miles north of the point of accident. These signals form part of a traffic-control system which extends between Dalton Jct., 24.5 miles south of North Yard, and North Yard. The controlling circuits are so arranged that when a south-bound movement passes signal 154LB all opposing signals between that signal and Valley View, 9.9 miles south of Gainesville, are caused to display their most restrictive aspects.

Movements over M-K-T Crossing are protected by an interlocking. Interlocking signal 2A, governing south-bound movements on track No. 1, is located 260 feet north of the crossing. A power-operated split-point derail is located in track No. 1 immediately south of this signal. The yard master's office and the control machine of the interlocking located in the northwest engle of the intersection at M-K-T Crossing.

This carrier's operating rules read in part as follows:

Restricted Speed. -- A speed that will permit stopping short of another train or obstruction, but not exceeding 20 miles per hour.

- 655. A train or engine stopped by a "stop and proceed" signal, may proceed at once at restricted speed
- 811. Cars set out or switched must be left with sufficient hand brakes set, after the air is released from auxiliary reservoir, to prevent moving.

The maximum authorized speed for passenger trains in the vicinity of the point of accident is 90 miles per hour.

Description of Accident

No. 112, a north-bound first-class passenger train, consisted of Diesel-electric units 87 and 81A, coupled in multiple-unit control, three baggage cars, one mail car, two chair cars, and one sleeping car, in the order named. The first, sixth, and seventh cars were of lightweight construction, and the other cars were of conventional all-sceel construction. This train departed from Fort Worth, 28.5 miles north of Cleburne, at 10:30 p. m., 10 minutes late, and stopped at signal 4082, which indicated Stop-and-proceed. It then proceeded northward and stopped a second time with the front end 1.4 miles south of the station at Gainesville. Almost immediately afterward the front end was struck by a cut of 20 freight cars.

Between 5 and 10 minutes before the accident occurred a yard crew at the north end of the auxiliary tracks north of M-K-T Crossing shunted two loaded cars against the north end of a cut of 20 cars which were standing on track No. 7 approximately 4,750 feet north of M-K-T Crossing. The cut of cars moved southward on the descending grade via track No. 7, the lead track, and track No. 1, passed signal 2A, which displayed an aspect to proceed, passed signal 154LB, which indicated Stop, trailed through the switch at the south end of track No. 1, and while moving on the main track at an estimated speed of from 18 to 35 miles per hour it struck the front end of No. 112.

The rear truck of the first Diesel-electric unit and the rear pair of wheels of the second unit of No. 112 were derailed. The front end of the first unit was somewhat damaged, and the second unit was slightly damaged. The two cars at the south end of the cut of cars, the rear truck of

the third car, and the front truck of the fourth car were derailed. The first two cars stopped on the west side of the track and at right angles to it. The other derailed cars remained upright and in line with the track. The first two cars were considerably damaged, and the other derailed cars were somewhat damaged.

The engineer of No. 112 was injured.

The weather was clear at the time of the accident, which occurred about 11:55 p. m.

Discussion

As No. 112 was approaching the point where the accident occurred the enginemen were maintaining a lookout ahead from the control compartment at the front of the locomotive. The members of the train crew were in the cars of the train. The train stopped at signal 4082, which indicated Stop-and-proceed, and then proceeded northward at a speed of approximately 18 miles per hour. The enginemen saw the cars shead at a distance of from 800 to 1,500 feet, and the engineer immediately made an emergency application of the brakes. The collision occurred almost immediately after the train stopped. The engineer estimated that the cars were moving at a speed of 18 or 20 miles per hour. The fireman thought they were moving at a speed of 25 to 35 miles per hour.

About 30 minutes before the accident occurred a yard locomotive pulled 42 cars to the north end of track No. 7. Twenty-two cars were detached from the north end of the cut and were moved to other tracks. After the cars were detached, a yard brakeman applied the hand brake on the car at the north end of the 20 cers which remained on track No. 7. About 20 minutes later the yard crew shunted two loaded care against the north end of the 20 cars. The yard brakeman rode one of the two cars and alighted immediately before the impact occurred. He said that the impact was not unusually severe, and that the cars at the north end of the out moved southward several feet and then stopped. yard brakeman then proceeded to another track. Apparently the 20 cars later started to move on the descending grade as a result of slack action. The two cars which were shunted against them did not couple with them. These care remained at the north end of track No. 7, and the members of the yard Claw were not aware that the 20 cars had moved out of track No. 7 until they were so informed by the yardmester. yard brakeman who applied the hand brake had been employed in this capacity during a period of approximately 9 months

prior to the time of the accident. The 20 cars were to have been moved off of track No. 7 within a short time, and he said he thought that the application of the hand brake on one car would be sufficient to hold the cars during the time they were to remain on the track. The members of the crew which removed the cars from the main track after the accident occurred could not remember afterward whether it had been necessary to release the hand brake on the north car. This brake was tested after the accident occurred and was found to function properly.

At the time the 20 cars moved out of track No. 7 the route was lined for a south-bound movement over M-K-T Crossing on track No. 1. The operator said he was under the impression that the yard locomotive was working in the south end of the yard, and he had lined the route so that it would not be necessary for a member of the yard crew to call him before moving from one track to another. After the cars passed M-K-T Crossing the operator notified the train dispatcher, but at this time No. 112 had passed the controlled signals at Valley View, the last controlled signals south of the point of accident.

Cause

This accident was caused by a cut of cars moving out of control on a descending grade as a result of an insufficient number of hand brakes being applied.

Dated at Washington, D. C., this twenty-fifth day of July, 1956.

By the Commission, Commissioner Clarke.

(SEAL) HAROLD D. McCOY,

Secretary.