# INTERSTATE COMMERCE COMMISSION WASHINGTON

REFORT NO. 3659 .

SEABCARD AIR LINE RAILROAD COMPANY

IN RE ACCIDENT

AT MATTHEWS, N. C., ON

OCTOBER 23, 1955

#### SUMMARY

Date: Cctober 23, 1955

Railroad Seaboard Air Line

Location: Matthews, N. C.

Kind of accident. Side collision

Trains involved: Freight : Freight

Train numbers 72 . 89

Locomotive numbers: Diesel-electric , Diesel-electric

unit 1770 units 1801, 1798. and

1798, and 1771

1111

Consists 23 cars, caboose ' 42 cars, caboose

Estimated speeds: Undetermined · 20-50 n r. h.

Cperation. Timetable and train orders

Track Single; 2° curve; 0.91 percent

ascending grade eastward

Weather. Clear

Time: 1:40 p. m.

Casualties 2 killed, 1 injured

Cause Failure to obey a meet order

#### INTERSTATE COMMERCE COMMISSION

## REPORT NO. 3659

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

#### SEABOARD AIR LINE RAILWAY COMPANY

Movember 23, 1955

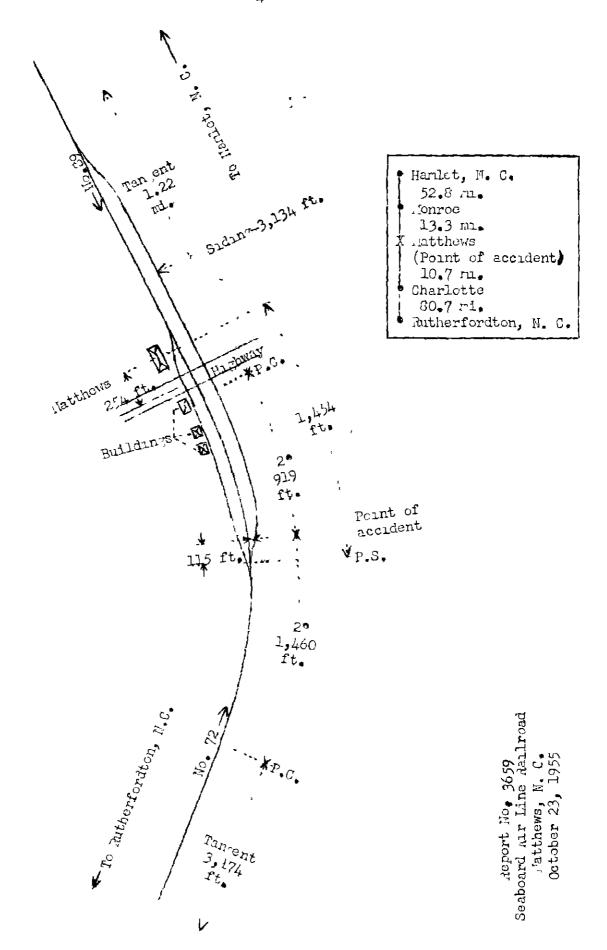
Accident at Matthews, N. C., on October 23, 1955, caused by failure to obey a meet order.

REPORT OF THE COMMISSION

# CLARKE, Commissioner:

On Cotober 23, 1955, there was a side collision between two freight trains on the Seaboard Air Line Rail-road at Matthews, M. C., which resulted in the death of two train-service employees, and the injury of one train-service employee.

Under a thority 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.



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## Location of Accident and Method of Operation

This accident occurred on that part of the Georgia Division extending between Putherfordton and Hamlet, M. C., 157.5 miles. In the vicinity of the point of accident this is a single-track line, over which trains are operated by timetable and train orders. There is no block system in use. At Matthews, 91.4 miles east of Butherfordton, a siding 3,134 feet in length parallels the main track on the south. The rest siding-switch is 1,454 for treat of the station. The accident occurred 115 foot east of the uist siding-switch, at the fouling point of the siding and the main track. From the rest there is a tangent 3,174 feet in 1 ngth and a 2° curve to the loft 1,460 feet to the print of accident and 919 foot eastward. From the east there is a tangent 1.22 miles in length and the curve on which the accident occurred. The grade is 0.01 preent ascending eastward at the point of accident. The grade for mist-bound trains averages 0.72 percent ascending throughout a considerable distance to a point approximately 900 feet test of the point of accident, and it averages 0.91 percent descending between that point and the point of accident.

This carrier's operating rules read in part as follows

14. ENGINE WHISTLE SIRVALS.

l'ota.--The signals proscrib d'are illustrated by "o" for short sounds, "\_\_" for longer sounds. \* \* \*

Sound:

Indication.

\* \* \*

(n) — —  $\circ$ 

Approaching meeting, waiting or passing points \* \* \*. (See Rule 90-A.)

16 & X

17. The headlight will be displayed to the front of every train by day and by night. In non-signalled territory when a train turns out to meet another the headlight must be extinguished aft r it has stopped clear of the main track.

- 90. Conductors and enginemen must have a mutual understanding as to their meeting stations, where practicable.
- before fouling the clearance point of the switch to be used by train in taking siding unless the train to be met has arrived and is in the clear and switch is set for main track movement \* \* \*

\* \* \*

90-A. On trains sauthped with air communicating signal system \* \* \*

on other trains, the ingineman will give Signal 14 (n) at least two miles before reaching meeting, waiting or passing point. When precticable, this signal will be acknowledged by the conductor by giving a "Slow Down" signal by holding out hand by day, or lantern at night, at arm's length on the engineman's side of the train. Then the signal can be seen by the engineman he must acknowledge by giving Signal 14 (n).

On all trains approaching meeting, waiting or passing points, conductors must be in position to observe the movement of their trains and when it becomes known that the rules or train order instructions are not being complied with, they must take immediate action to stop their trains.

211-C. Enginemen must show train orders to firemen and, when practicable, to forward trainmen. Conductors must show train orders, when practicable, to trainmen. Firemen and trainmen are required to read them and, if necessary, remind enginemen and conductors of their contents, and take such other action as may be necessary for the safety of the train.

FORMS OF TRAIN ORDERS.

S-A.

Fixing Meeting Points for Opposing Trains.

#### EXAMPLES.

(1) NO 1 ENG 3012 MEET NO 2 ENG 3013 AT B

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Trains receiving these orders will run with respect to each other to the designation opened and there must in the manner prescribed by the rules.

(3) When it is desired that the superior train take siding, examples above may be modified.

Under example (1), NC 2 Take STOING

The maximum authorized speed for freight trains in the vicinity of the point of accident is 49 miles per hour.

## Description of Ancident

No. 72, an east-bound second-class freight train, consisted of Diesel-electric unit 1770, 2% cars, and a caboose. At Charlotte, 10.7 miles west of Matthews and the last open office, the crew received copies of train order To. 25 resding in part as follows

\* \* \*

No 72 Eng 1770 meet In 89 Eng 1901 at Matthews No 72 toke siding

This train depented from Charlotte at 1 15 m. m., 3 hourd 15 minutes late, and while entering the siding at instances the sixth car was struck by No. 89 at the fouling point of the west and of the siding and the main track

No 80, a west-bound second-class frought train, consisted of Diesel-electric units 1801, 1798, and 1771, coupled in miltiple-unit control, 48 cars, and a caboose At Morroc, 13.3 miles east of Patthews and the last open office, the craw received comies of train order Mo. 25. The train passed Morroe at 1.20 p. m., 1 hour 20 minutes late, and while moving at a speed veriously estimated at from 20 to 50 miles per hour it struck Mo. 72

The fifth to the eleventh cars, inclusive, of No. 72, and the locomotive and the first 16 cars of No. 80 were denaled. The first Diesel-Alectric unit of No. 80 stopped on its right side at an angle of approximately 90 degrees to the track. The front end was toward the north, and the rear end was on the track structure at a count 180 feet west of the point of collision. The other two units remained upright. They stopped immediately east of the first unit and parallal to it. The denaled cars stopped in various cositions of or near the tracks. The Diesel-electric units

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were badly demogra, the eighth, minth, and tenth cars of No. 72, and the first, fourth, seventh, and eighth cars of No. 89 were destroyed, and the other densited cars were considerably damaged.

The engineer and the front brakeman of Mo. 89 were killed. The fireman of Mo. 89 was injured.

The weather was elerr at the time of the accident, which occurred about 1 40 p.m.

The Diosel-clectric units of No. 89 were of the road-switcher type. The sanding devices were arranged to function automatically when the brakes were applied in emergency. Both the first Diosel-clectric unit and the caboose were equipped with radio equipment.

#### Discussion

When the accident occurr d the crows of both trains held copies of train order To. 25. Under the provisions of this order, No. 72 was required to enter the siding at matthews at the west switch, and Yo. 89 was required to stop short of the clearance point at the west end of the siding unless No. 72 had arrived and was clear of the main track and the switch was properly lined.

As No. 72 was approaching the point where the accident occurred the inginer is not the front brakemin were on the locomotive. The conductor and the flagmen were in the caboose. The headlight was lighted. The front brakemen alighted and opened the west siding—switch, and the trained in the locomotive intered the siding he observed No. 89 approaching at a speed at which it could not be stopped short of the switch. He thought that at this time the locomotive of No. 89 was about 450 feet east of his locomotive and that it was moving at a speed of about 40 miles per hour. He immediately made are emergency application of the brakes and sounded a marning on the procumatic horn. He thought that his train stopped before the collision occurred. The front prokemen estimated that No. 89 was moving at a speed of 40 or 50 miles per nour. He thought that No. 72 was still in motion when the collision occurred.

As To. 89 was approaching the point where the accident occurred the angineron and the front brakers were on the locomotive. The conductor and the flagmen were in the caboose.

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The brakes of the train had been tested and had functioned properly when used. The fireman seid that he and the engine r and the front brokeman had each read and under-stood train order No. 25. He said that about 10 minutes before the train reached Matthews he left the control compartment of the first Dissel-electric unit to patrol the units. He said that the engineer sounded the meetingpoint whistly signed when the train was between 1 and 2 miles east of Matthews. He thought that there was en application of the brokes before the locomotive pessed the est siding-switch and that the speed of the train was reduced from 45 or 50 miles per hour to 30 or 35 miles per hour in the vicinity of the switch. He said that the speed had been reduced to 25 or 30 miles her hour when the locomotive reached a grade crossing approximately 250 feet west of the station and that there was an emergency application of the brakes in the vicinity of this crossing. He could not estimate the speed at the time of the collision. A fireman not on duty who was in the control compartment of the second unit estimated that the speed was 35 or 40 miles per hour when the brakes were applied in emergency. He had not read the train orders and had not noticed whether a meeting-point whistle signal had been sounded or whether there had been a preceding application of the brakes. The conductor and the flagman said that they had each read and understood train order To. 25. They had not communicated with the employees on the locomotive after the order was received. Feither of these employees heard a meeting-point whistle signal sounded as the train approached Matthews. They said they thought it would be impossible to hear such a signal from the caboose while the train was in motion. As the train was approaching the east siding-switch the conductor stepped to the rear platform of the caboose to be in a position to identify No. 72. He said he thought there was an application of the brakes as the train was approaching the switch and that this application was later released. He estimated that the caboose passed the switch at a speed of about 20 miles per hour. He said that the braies became applied in emergency when the caboose was in the vicinity of the soltch. Eccause of curvature of the track, a train with few cars standing at the west end of the siding is not visible from the caboose of an approaching west-bound train. The flagman said that there was en application of the brakes as the train approached Matthews, and he thought that the spind had bein reduced from about 40 miles per hour to 20 or 25 miles per hour when the brakes became applied in emergency. An employed who was watching

the train move over the grade crossing west of the station estimated that the train was moving at a speed of 20 or 25 miles per hour when the brakes became applied in emergency. He said that this occurred after the locomotive passed the crossing. He heard the grade-crossing whistle signals sounded for two crossings as the train approached Matthews, but he did not notice whether a meeting-point whistle signal was sounded.

Aft r the accident occurred it was found that the automatic brake valve of the first Diesel-electric unit was in emergency position, the independent brake valve was in application position, and the sander valve was open. The double-heading cocks of the three units were in proper positions for control from the first unit. The brake valves of the three units were removed and tested in the shops of the carrier at Pamlet. To defective condition was found. The brakes of the undamaged cars of the train were tested after the accident occurred. A slack-adjuster key bolt was missing on one of the cars. The brakes of the other cars were found to be efficient.

Because of curvature of the track and buildings north of the track, the west siding—switch at Metthews is not visible from an approaching west-bound locomotive until the locomotive reaches a point approximately 925 feet east of the switch. After the accident occurred the rails were found to be sanded throughout a distance of 875 feet immediately past of the switch. From this it appears that the em reency application of the brakes was not made until the locomotive of No. 89 reached a point from which the front and of No. 72 was visible, and from the distance which the train moved after the brakes were applied and the amount of dam go which resulted from the collision it appears that the speed of the train was considerably in excess of 20 mil s per hour at the time the prakes were applied.

## <u>Ceuse</u>

This accident was caused by failure to obey a meet order.

Dated at Vashington, D. C, this twenty-third day of Movember, 1955.

By the Commission, Commissioner Clarke.

(SEAL)

HAROLD D. McCOY,

Secretary.