

RAILROAD ACCIDENT INVESTIGATION

Report No 3803

SOUTHERN RAILWAY COMPANY

SCOTT AIR FORCE BASE, ILL

MARCH 6, 1958

INTERSTATE COMMERCE COMMISSION

Washington

SUMMARY

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DATE	March 6, 1958
RAILROAD	Southern
LOCATION	Scott Air Force Base, Ill
KIND OF ACCIDENT	Derailment
TRAIN INVOLVED	Freight
TRAIN NUMBER	153
ENGINE NUMBER	Diesel-electric units 6804, 6302, 6829 and 4177
CONSIST	77 cars, caboose
SPEED	45 m p h
OPERATION	Timetable and train orders
TRACK	Single; tangent, 0 25 percent descending grade eastward
WEATHER	Foggy
TIME	2 35 a m
CASUALTIES	1 killed, 2 injured
CAUSE	Malicious tampering with switch

INTERSTATE COMMERCE COMMISSION

REPORT NO 3803

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

SOUTHERN RAILWAY COMPANY

September 5, 1958

Accident at Scott Air Force Base, Ill , on March 6, 1958, caused by malicious tampering with
a switch

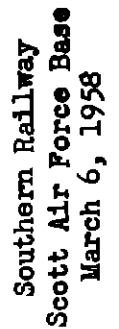
REPORT OF THE COMMISSION¹

TUGGLE, Commissioner

On March 6, 1958, there was a derailment of a freight train on the Southern Railway at Scott Air Force Base, Ill , which resulted in the death of 1 train-service employee and the injury of 2 train-service employees

¹Under authority of section 17 (2) of the *Interstate Commerce Act* the above-entitled proceeding was referred by the Commission to Commissioner Tuggle for consideration and disposition

To East St. Louis



Location of Accident and Method of Operation

This accident occurred on that part of the St. Louis Division extending between East St. Louis, Ill. and Princeton, Ind., 159.8 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 Scott Air Force Base, 22.2 miles east of East St. Louis, four auxiliary tracks connect various areas of the base with tracks of the Southern Railway. The most westerly of the auxiliary tracks at the base diverges to the north from the main track at a point 1.56 miles west of the area where station service for this installation normally is performed. The switch of this track is facing-point for eastbound movements. The accident occurred at a point about 20.6 miles east of East St. Louis and within the limits of the base at the turnout of the auxiliary track. The main track is tangent throughout a distance of 4,099 feet immediately west of the switch. For more than 3,300 feet immediately west of the point of accident the grade for eastbound trains varies between 0.35 percent and 0.25 percent descending, and it is 0.25 percent descending at that point. From the west on the auxiliary track there are, in succession, a No. 10 turnout to the left 95 feet, and a 14° curve to the left 370 feet.

The switch stand of the auxiliary-track switch is of the ground-throw intermediate-stand type and is located 9 feet 4 inches north of the centerline of the track. It is equipped with switch targets and an electrically lighted switch lamp, mounted on the spindle, respectively, 5 feet 6-1/2 inches and 7 feet 5-3/8 inches above the tops of the rails. When the switch is in normal position for movements on the main track a circular white target and a green light are displayed in the direction of an approaching train. When the switch is lined for entry to the auxiliary track a rectangular red target 2 feet 7 inches long and 1 foot wide, mounted horizontally, and a red light are displayed. Keepers are provided by which the operating lever may be secured in either normal or reverse position. A standard switch lock is provided for securing the latch of the keeper when the operating lever is in normal position. A derail is located on the auxiliary track 217 feet east of the switch.

The maximum authorized speed for freight trains is 49 miles per hour.

Description of Accident

No. 153, an eastbound first-class freight train, consisted of diesel-electric units 6804, 6302, 6829, and 4177, coupled in multiple-unit control, 77 cars, and a caboose. This train departed from Coapman, 2.6 miles east of East St. Louis, at 1:55 a. m., 25 minutes late, and while moving at a speed of 45 miles per hour it was diverted to an auxiliary track at Scott Air Force Base and the diesel-electric units and the first 36 cars were derailed.

The four diesel-electric units overturned and stopped on their right sides east of the auxiliary track and approximately parallel to it with the front end of the first unit about 490 feet east of the auxiliary track switch. Separations occurred between the first and second units and between the second and third units. The first unit was approximately 380 feet north of the main track and the trailing units were, respectively, about 280 feet, 210 feet, and 165 feet north of that track. The derailed cars stopped in various positions on or near the main and auxiliary tracks in the area between the switch and a point adjacent to the rear unit of the locomotive, approximately 375 feet east of the switch. The diesel-electric units and 30 cars were heavily damaged, 5 cars were somewhat damaged, and 1 car was slightly damaged.

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

It was foggy at the time of the accident, which occurred about 2:35 a. m.

Discussion

As No 153 was approaching the point where the accident occurred, the engineer and the fireman were in the control compartment at the front of the locomotive and the front brakeman was in the control compartment of the fourth diesel-electric unit. The conductor and the flagman were in the caboose. The headlight was lighted brightly. The brakes had been tested before the train departed from the yard at Coapman and had not been applied en route. The engineer was killed in the accident. The fireman said that as the locomotive closely approached a mile post, located 2,589 feet west of the switch involved, the engineer, who was holding his watch in his hand, informed him that the indicated speed was then 45 miles per hour and that he intended to time the train between mile posts to check the accuracy of the speed-recording device, which was not equipped with a recording tape. Visibility was restricted by fog to a maximum distance of about 900 feet, as estimated by surviving members of the crew. The fireman said that apparently he and the engineer simultaneously saw the red light at the switch as the engineer made an emergency application of the brakes at the same time he called a warning. The engineer then orally acknowledged his warning. The derailment occurred before the speed of the train had been materially reduced. The fireman said that he thought the locomotive became derailed in the vicinity of the derail located on the auxiliary track.

After the accident occurred the switch was found to be lined for entry to the auxiliary track, with the operating lever latched in the keeper. The switch lock was missing. The south switch point was overturned and the tie bars and lugs were badly bent, obviously as a result of the derailment. The switch points were damaged during the derailment but there were no marks on them which indicated that the switch previously had been trailed through. The switch stand was not damaged. Both the main track and the auxiliary track were destroyed throughout a distance approximately 300 feet east of the switch.

About 2 hours after the accident occurred the missing switch lock was found under the south rail between the second and third switch ties. It was broken. The overflow of metal at each end of the rivet attaching the hinged end of the shackle to the case was sheared and the sides of the case adjacent to the rivet had been wedged outward sufficiently to permit the hinged end of the shackle to be removed from the case. The case also had been wedged outward from the other end of the shackle. There were batter marks on the front of the case, indicating that it had been struck several blows with a metallic object.

The investigation disclosed that the last train to pass over the switch before No 153 was derailed was No 154, a westbound freight train, which passed this point about 6 hours 20 minutes before the accident occurred. The engineer of No 154 said that at that time the green light of the switch lamp and the white switch target were properly displayed. Neither the engineer nor the fireman of No 154 observed anything unusual as their locomotive passed over the switch. The switch was last used by members of the crew of No 60, a westbound freight train which performed local switching service in this vicinity, about 34 hours before the accident occurred. The front brakeman of this train said that he operated the switch four times while the crew was performing switching service in the vicinity of the auxiliary track. After completion of the switching movements at this point he restored the switch to normal position. He said he observed that the switch points fitted properly and he tested the switch lock to ascertain that it was locked before his train departed from this point. The switch was last inspected by an assistant track supervisor about 12 30 p m on March 4, 1958, and he found no defective condition.

Cause

This accident was caused by malicious tampering with a switch

Dated at Washington, D C , this fifth
day of September, 1958

By the Commission, Commissioner Tuggle

(SEAL)

Harold D McCoy,

Secretary

Interstate Commerce Commission

Washington 25, D C

OFFICIAL BUSINESS

RETURN AFTER FIVE DAYS

**POSTAGE AND FEES PAID
INTERSTATE COMMERCE COMMISSION**