RAILROAD ACCIDENT INVESTIGATION

Report No 3830

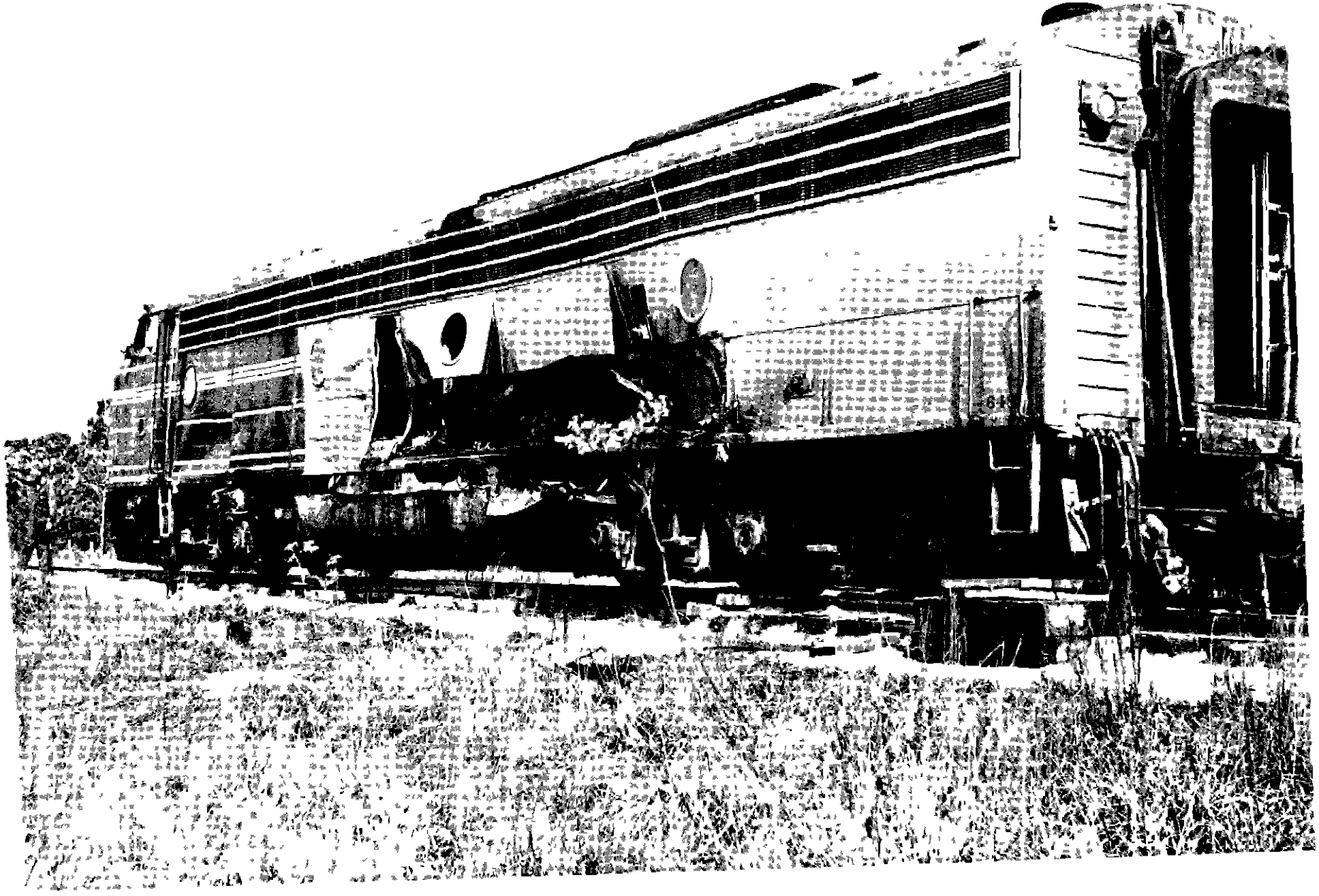
CHICAGO, ROCK ISLAND AND PACIFIC RAILROAD COMPANY

NORTH HOUSTON, TEXAS

JANUARY 16, 1959

INTERSTATE COMMERCE COMMISSION

Washington



SUMMARY

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DATE	January 16, 1959	
RAILROAD	Chicago, Rock Island and Pacific	
LOCATION	North Houston, Texas	
KIND OF ACCIDENT	Collision	
EQUIPMENT INVOLVED	Passenger train	Motortruck
TRAIN NUMBER	508	
LOCOMOTIVE NUMBERS	Diesel-electric units 648A and 632B	
CONSIST	11 cars	
SPEEDS	79 m p h	50 - 60 m p h
OPERATION	Timetable, train orders and automatic block-signal system	
TRACK	Single, tangent, 0 06 percent ascending grade northward	
HIGHWAY	Tangent, level, crosses track at angle of 90°	
WEATHER	Clear	
TIME	5 55 p m	
CASUALTIES	1 killed, 53 injured	
CAUSE	Failure to stop motortruck short of train moving over rail-highway crossing	

INTERSTATE COMMERCE COMMISSION

REPORT NO 3830

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

CHICAGO, ROCK ISLAND AND PACIFIC RAILROAD COMPANY

April 17, 1959

Accident near North Houston, Texas, on January 16, 1959, caused by failure to stop a motortruck short of a train moving over a rail-highway crossing

REPORT OF THE COMMISSION[1]

FREAS, Commissioner,

On January 16, 1959, there was a collision between a passenger train of the Chicago, Rock Island and Pacific Railroad Company and a motortruck at a rail-highway grade crossing near North Houston, Texas, which resulted in the death of the truck driver, and the injury of 48 train passengers, 2 dining-car employees, 2 chair-car attendants, and 1 train-baggageman

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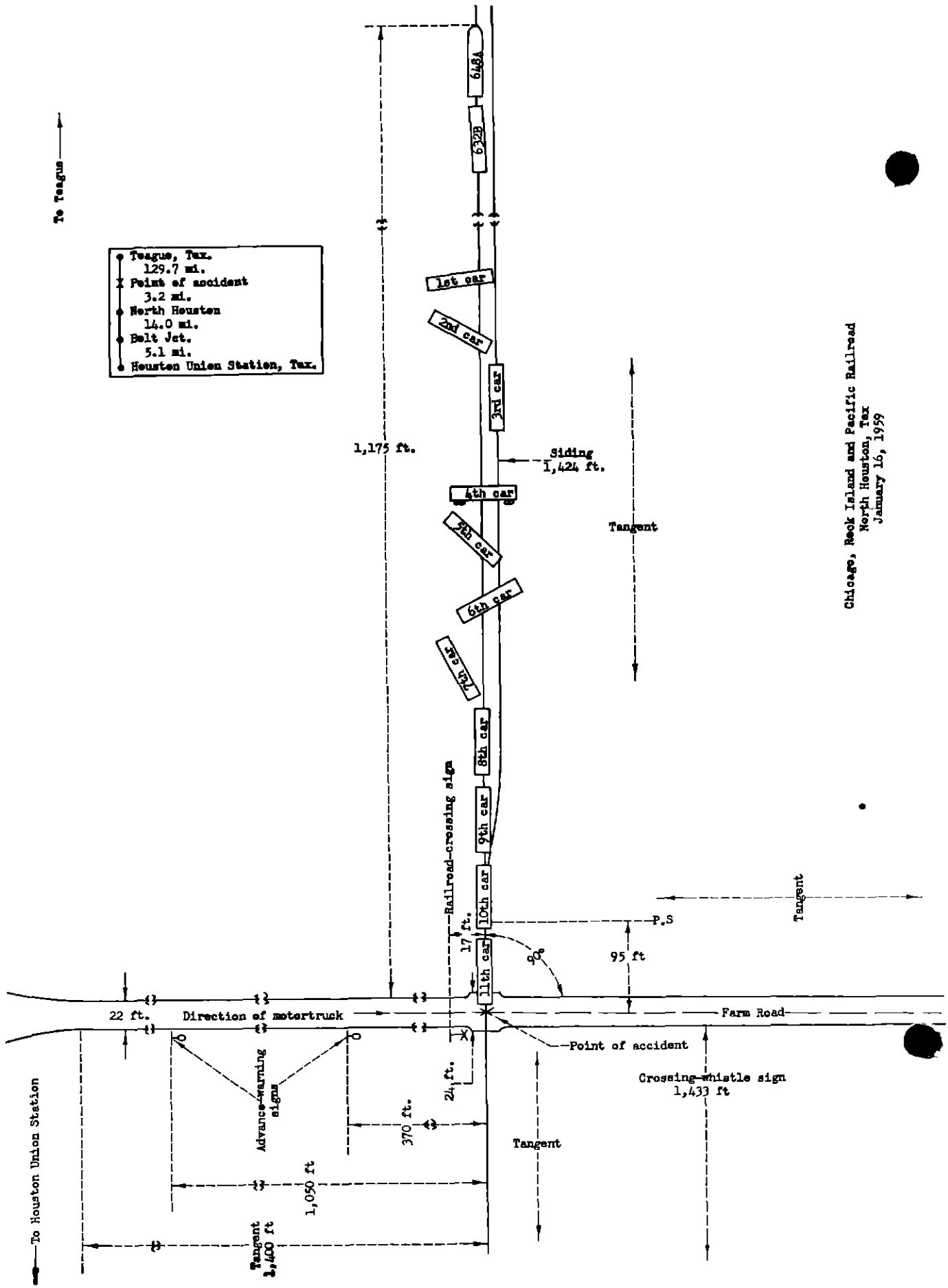
[1]Under authority of section 17 (2) of the *Interstate Commerce Act* the above-entitled proceeding was referred by the Commission to Commissioner Freas for consideration and disposition



Chicago, Rock Island and Pacific Railroad
North Houston, Tex
January 16, 1959

Location of Accident and Method of Operation

This accident occurred on that part of the Joint Texas Division of the Chicago, Rock Island and Pacific Railroad and the Fort Worth and Denver Railway extending between Belt Jct , 5 1 miles north of Houston Union Station, and Teague, Texas, 146 9 miles, a single-track line over which trains of both carriers are operated by timetable, train orders, and an automatic block-signal system The accident occurred on the main track, 22 3 miles north of Houston Union Station and 3 2 miles north of North Houston, where the railroad is crossed at grade by Farm Road 1960 In this vicinity, a siding 1,424 feet in length parallels the main track on the east The south switch of the siding is facing point for northbound trains and is located 95 feet north of the highway crossing The main track is tangent a considerable distance north and south of the highway crossing The grade for northbound trains is 0 06 percent ascending in the vicinity of the point of accident

Farm Road 1960 intersects the railroad at an angle of 90° and is surfaced with bituminous material to a width of 22 feet The crossing is surfaced with treated planking to a width of 24 feet From the west the highway is tangent about 1,400 feet to the point of accident and a considerable distance eastward Its grade is practically level in the vicinity of the crossing and is level over the crossing

Two circular railroad-crossing advance warning signs, 24 inches in diameter, are located 370 feet and 1,050 feet west of the railroad and adjacent to the south side of the highway A standard crossbuck railroad-crossing sign is located 17 feet west of the main track and adjacent to the south side of the highway A crossing-whistle sign for northbound trains is placed adjacent to the track structure 1,433 feet south of the crossing

C R I & P operating rules read in part as follows

14 Engine Horn or Whistle Signals — The horn or whistle must be sounded as prescribed by rule or law * * *

* * *

NOTE — The signals prescribed are illustrated by "o" for short sounds, "—" for longer sounds * * *

SOUND	INDICATION
* * *	
(1) — — o ——	Approaching public crossings at grade * * * To be prolonged or repeated until crossing is occupied by engine or car * * *

* * *

17 Headlights — The standard white headlight must be displayed brightly to the front of every train by day and by night

* * *

30 Ringing Bell —* * * the engine bell must be rung * * * while approaching and passing public crossings at grade, * * *

Motor vehicle laws of the state of Texas read in part as follows

Section 8 Rate and speed of vehicles —Subsection 1 Speed restrictions (a) No person shall drive a vehicle on a highway at a speed greater than is reasonable and prudent under the conditions then existing, having regard to the actual and potential hazards when approaching and crossing an intersection or a railway grade crossing, * * *

Sec 86 Obedience to signal indicating approach of train —Whenever any person driving a vehicle approaches a railroad grade crossing, the driver of such vehicle shall stop within (50) feet but not less than fifteen (15) feet from the nearest rail of such railroad and shall not proceed until he can do so safely when

* * *

(c) A railroad engine approaching within approximately fifteen hundred (1500) feet of the highway crossing emits a signal audible from such distance and such engine by reason of its speed or nearness to such crossing is an immediate hazard,

(d) An approaching train is plainly visible and is in hazardous proximity to such crossing

The maximum authorized speed for the train involved in the accident was 79 miles per hour

Description of Accident

No 508, a northbound first-class passenger train, consisted of diesel-electric units 648A and 632B, coupled in multiple-unit control, 1 baggage car, 1 baggage-express car, 1 baggage car, 3 coaches, 1 dormitory-coach, 1 dining car, 1 parlor car, and 2 sleeping cars, in that order All cars were of all-steel construction All the cars, except the 1st and 3rd, were equipped with tightlock couplers This train departed from Houston Union Station at 5 23 p m , 23 minutes late, passed Belt Jct , the last open office, at 5 34 p m , 23 minutes late, passed North Houston, and while moving at a speed of 79 miles per hour, as indicated by the tape of the speed-recording device, the leading diesel-electric unit was struck by a motortruck at a rail-highway grade crossing located 3 2 miles north of North Houston

The motortruck consisted of a tractor and semi-trailer owned by Austin Brothers Steel Company, Dallas, Texas The driver held Texas Department of Public Safety commercial operator's license No 0967232 The tractor was a 1956 model White, powered by a 6-cylinder gasoline engine, and was equipped with a conventional cab and two fuel tanks of 133 gallons total capacity It carried license No 8V808 The semi-trailer was of the flat-bed type It was of steel construction, mounted on tandem axles with dual wheels, and it bore Texas license No 7U6464 The tractor and the semi-trailer were equipped with air brakes At the time of the accident the semi-trailer was loaded with approximately 31,000 pounds of steel cargo The total weight of the vehicle and cargo was about 51,000 pounds The vehicle was loaded at the Houston branch of the steel company and was en route to Dallas, Texas It was moving eastward at an estimated speed of 50 to 60 miles per hour on Farm Road 1960, when it entered the crossing and struck the leading diesel-electric unit of No 508

No 508 stopped with the locomotive about 1,175 feet north of the crossing The entire train was derailed with the exception of the front truck of the leading diesel-electric unit and the rear truck of the last car Separations occurred at both ends of the 1st to 7th cars, inclusive The

equipment of No 508 stopped in various positions on or near the track structure as shown in the sketch of this report Four freight cars standing on the siding north of the crossing were struck by equipment of No 508 and were derailed The diesel-electric units, the 4th to 9th cars, inclusive, of No 508, and 3 of the freight cars were heavily damaged The 1st to 3rd cars, inclusive, of No 508, and a freight car, were slightly damaged

The tractor and the semi-trailer stopped in the northwest angle of the intersection The tractor was separated from the semi-trailer and was destroyed The semi-trailer was heavily damaged

The train-baggageman of No 508 was injured

The weather was clear at the time of the accident, which occurred about 5 55 p m

During the 30-day period preceding the day of the accident the average daily railroad movement over the crossing was 10 7 trains During the 24-hour period beginning at 12 01 a m , January 23, 1959, a total of 1,253 motor vehicles passed over the crossing

Discussion

As No 508 approached the point where the accident occurred its speed was 79 miles per hour The enginemen were in the control compartment at the front of the locomotive, and the members of the train crew were at various locations in the cars of the train The brakes had been tested and had functioned properly when used en route The headlight was lighted brightly, and the oscillating headlight was operating The bell was in continuous operation because of the numerous rail-highway crossings in the Houston area When the train was about 500 feet south of the crossing-whistle sign located 1,433 feet south of the crossing, the engineer began to sound the grade-crossing signal on the locomotive horn, because he observed an automobile and two motortrucks closely approaching the crossing from the west He said that he continued to sound the grade-crossing signal as the train approached and moved over the crossing The automobile and one of the motortrucks passed over the crossing ahead of the approaching train The enginemen said that as the train reached a point about 300 feet south of the crossing, they saw that the second motortruck was moving at an estimated speed of 50 to 60 miles per hour when it was about 200 feet from the crossing The engineer realized at this time that the motortruck probably would not stop short of the crossing, and he immediately initiated an emergency application of the brakes The speed of the train was not materially reduced when the motortruck entered the crossing and struck the left side of the leading diesel-electric unit

The truck driver, who was the sole occupant of the motortruck, was killed in the accident and the reason for his failure to stop the vehicle short of the crossing could not be determined Skid marks up to 87 feet in length indicated that the driver had made an attempt to stop the motortruck immediately before the collision occurred, and that the brakes were functioning

An examination of the track structure after the accident occurred disclosed that it was damaged throughout a distance of 780 feet northward from the point of accident It is apparent that the motortruck struck the leading diesel-electric unit with sufficient force to cause the rear truck to become derailed, and the general derailment occurred at the facing point switch

From a point 1,400 feet west of the crossing, an eastbound motorist on Farm Road 1960 has an unobstructed view of a northbound train approaching the rail-highway crossing throughout a distance of approximately 3,000 feet immediately south of the crossing

Standard highway-crossing signals of the flashing-light type were in a stage of construction at the crossing when the accident occurred

Cause

This accident was caused by a failure to stop a motortruck short of a train moving over a rail-highway crossing

Dated at Washington, D C , this seventeenth day of April, 1959

By the Commission, Commissioner Freas

(SEAL)

HAROLD D McCOY,

Secretary