



MINISTRY OF TRANSPORT AND CIVIL AVIATION

RAILWAY ACCIDENTS

REPORT ON THE COLLISION

which occurred on

10th August 1956

at

YARMOUTH VAUXHALL STATION

in the

EASTERN REGION

BRITISH RAILWAYS

LONDON: HER MAJESTY'S STATIONERY OFFICE

1956

3rd October, 1956.

SIR,

I have the honour to report for the information of the Minister of Transport and Civil Aviation, in accordance with the Order dated 14th August 1956, the result of my Inquiry into the collision which occurred at about 1.12 p.m. on 10th August 1956, at Yarmouth Vauxhall terminal station in the Eastern Region, British Railways.

The 12.26 p.m. special Down passenger train from Norwich to Yarmouth was wrongly admitted under clear signals to a platform line which was occupied by a pilot engine standing at the head of some empty passenger coaches. The driver would normally have seen the obstruction in time to stop, but his view towards the station across the curved approach was blocked by an outgoing train on the adjacent line; his brake application was late in consequence, but the speed had been reduced to about 10 m.p.h. before the collision occurred. There was considerable damage at the front ends of both the engines, but there was no derailment and only minor damage to the coaches.

Eight passengers sustained minor injuries or shock; four of them were taken to hospital in ambulances which arrived 12 minutes after the accident, but were not detained. The interruption to traffic was not serious and normal working was resumed two hours after the accident.

The weather was fine and clear.

DESCRIPTION

The attached plan shows the general arrangement of the line and the relevant signals. The approach from Breydon Junction, $1\frac{1}{4}$ miles away, is on a gradual curve to the right which becomes sharper towards the station. The gradient is negligible, and the tracks are at ground level or on low bank.

From the engine of an approaching train the view towards the station is restricted at first by an embankment and overbridge carrying the railway from Yarmouth Beach towards Gorleston which crosses the line about 220 yards from the platforms, between the signal box and the home signal. It becomes good, however, as the bridge is approached, unless an outgoing train on the Up line happens to be passing; the view towards the platforms across the curved approach is then blocked for a short time by the Up train.

The incoming (Down) home signal for all four platform lines is about 350 yards from the platform ramps; it is equipped with a "theatre" type route indicator, and there is a "calling on" arm underneath it. There are also bracketted subsidiary arms for the lines to the east and west of the platform lines. The distant signal arm is fixed at caution. The advanced starting signal for the Up line is about 530 yards ahead of the platform ramps, and the starting signal is nearly opposite the signal box which is about 180 yards from the ramps.

The signal box is of normal design with brickwork up to the operating floor, 12 ft. above rail level, and a timber superstructure. The windows extend along the whole of the front and partly along the sides, and the signalman has a good view of the area under his control. The four levers which control the home signal, one for each route, are side by side near the Norwich end of the 63 lever frame, and are flanked by the levers which control the subsidiary and "calling on" arms. The levers for the outgoing signals are at the other end of the frame.

All the levers are properly interlocked, but there are no track circuits at Yarmouth to hold the signal levers or to indicate to the signalman that a route is occupied, nor are there any electrical controls between the signals and the block. It is therefore possible for the signalman to clear a signal at any time provided that the correct route has been set up, for a line leading to an occupied platform. The chance of this being done through inadvertence when the line ahead is occupied, has always been recognised, and the rules require that a reminder appliance, which is in the form of a lever collar, shall be placed on the lever handle on such occasions to prevent release of the catch. At Yarmouth Vauxhall the lever collars are kept on the instrument shelf above the levers on which they are most frequently used.

The passenger train consisted of eight vacuum braked coaches and a van, weighing 259 tons, and it was drawn by a 4-4-0 type engine fitted with the Westinghouse brake controlled by the vacuum ejector. The driver's position was on the right. The total brake power of the train was approximately 65% of the weight of 354 tons. The engine standing in No. 2 platform was a similar one, and it had just backed on to the five empty coaches of a train from Liverpool Street which had arrived at 12.59 p.m. The tender was in contact with the end coach, but it had not yet been coupled.

The shock of the collision was mainly absorbed by the crumpling of the comparatively light section of the framing of both engines ahead of the smoke boxes. The tender buffers of the pilot engine were pushed under the buffers of the first empty coach which dented and punctured the tender tank plating. The leading coach of the Norwich train had only one broken window and minor damage to the underframe, and there was slight damage to the buffing and drawgear of three other coaches.

REPORT

The Norwich train which carried about 75 passengers was running a few minutes late. Driver R. W. Sampher said that he was given a clear run through Breydon Junction and that as he approached Yarmouth Vauxhall after passing the "fixed" distant he saw the home signal in the clear position with the platform route indicator below showing "2". An outgoing train was passing slowly under the bridge at the time and he did not get a clear sight of the engine facing him in No. 2 platform until he had passed the signal box. His first action was to look at the points ahead of him to see if the route had been changed to No. 1 platform; he then applied the brake fully and shouted a warning to his fireman. Before the collision occurred he had time to reverse the engine but not to open the regulator. Driver Sampher was fully satisfied with the working of the brakes, but he said that he delayed the application after first seeing that No. 2 platform line was obstructed until he had travelled perhaps 70 yards while his mind registered the situation and he checked the lie of the points.

Fireman P. F. G. White said that he saw the signalman in the box waving his arms as they ran by, but did not immediately understand that he meant the train to stop; a moment later the driver warned him of the obstruction ahead. He opened the sanders and had completely screwed down the handbrake before the collision happened.

Driver A. G. G. Raven had backed the pilot engine on to the empty coaches a few minutes before the accident and had then been looking towards the rear and to the side for the shunter. He suddenly saw the approaching train a short distance ahead, put the Westinghouse brake lever to the full release position, and then caught hold of the fireman who was unprepared, to steady him before the impact took place. Neither was hurt.

Relief Signalman J. W. Gasson had taken duty in Yarmouth Vauxhall signal box at 6.0 a.m. that morning. He frankly admitted that he had pulled the lever for the home signal to No. 2 platform which he knew to be occupied, and made no excuses for his mistake. He was thoroughly familiar with the working at Yarmouth Vauxhall, there was nothing wrong with the signalling, and weather conditions were clear. There had been some dislocation in working caused by the failure of a diesel train at Breydon Junction half an hour before, which might have necessitated single line working and did cause some delay, but Gasson stated firmly that this gave him no excuse for a lapse which he deplored and for which he could not account.

He explained that at about 1.10 p.m., he received the "Train Entering Section" bell code from Breydon Junction for the train from Norwich, and he intended to hold it at the home signal until a path was clear into the station. At that time No. 2 platform line was occupied by the pilot engine and the empty coaches of the train from Liverpool Street which had arrived 11 minutes earlier, and Nos. 1 and 4 platform lines were also occupied. No. 3 platform line was clear, but the approach to it from the Down line over the Up line was blocked as the route had been set for the outgoing train which left No. 4 platform also at 1.10 p.m., 5 minutes late. Gasson had not received "Line Clear" for this train from Breydon Junction but he knew that it would be accepted in a minute or two and he therefore let it go forward to wait at the advanced starter. This was the train which obscured Driver Sampher's view as he approached Yarmouth.

Gasson went on to say that, if working had been punctual, the empty coaches would have been moved in time for the Norwich train to be accepted into No. 2 platform where it usually arrived, but he appreciated that on this occasion the Norwich train would have to be run into No. 3 platform when the approach was clear, before the empty coaches could be drawn out of No. 2 line. He suddenly realised as the engine of the Norwich train was passing his box that he must have pulled off the signal for No. 2 platform line by mistake and he ran immediately to the window to try to attract the attention of the enginemen. He did not have time to pick up his flag.

The setting of the routes for subsequent movements proved, through the interlocking, that Gasson had put the home signal lever for No. 2 line back in the frame after the train from Liverpool Street had arrived at that platform. He said that after the accident he found collars on the signal levers for Nos. 1, 3 and 4 platforms. He could not remember whether he had put a collar on the signal lever for No. 2 platform line but thought that he must have done so because he was usually meticulous in the use of the collars. He could only suggest that he must have removed the collar from that lever, and that he had then pulled the lever in a moment of aberration, instead of removing the collar from No. 3 line lever where it was unnecessary at that time, as the lever was locked normal by the route set up for the outgoing train. He would have had to remove this collar during his next series of movements to admit the Norwich train into No. 3 platform line after the outgoing train had passed.

Station Master N. Timm and District Inspector G. Parkinson both confirmed that Gasson had a reputation in the district for his care in the use of lever collars.

CONCLUSION AND REMARKS

This accident was caused by an inexplicable lapse of a senior signaller of long service who has an excellent record. Relief Signaller Gasson is 52 years of age and had last been medically examined and passed fit two years ago. He said that he had no troubles on his mind, and at my Inquiry he appeared to be in good health and mentally alert. I have no hesitation in accepting that he was not normally lax in the use of lever collars, and I can only assume that he freed and pulled the wrong lever in a moment of aberration as he suggested. Such instances are extremely rare.

A track circuit on the platform line, which locks the home signal lever when the line is occupied, would have prevented the mistake. There is an extensive programme for the installation of such controls, though Yarmouth Vauxhall, where working conditions are better than at many other stations, has not been given high priority for this work. There is, however, an additional reason now for providing track circuits here. The view from the signal box into the terminal end of the station is obstructed when No. 3 or No. 4 platform line is occupied, owing to the curvature of the track, and with the increasing use in future of the new short diesel train sets the number of occasions on which a short train will be out of sight of the signaller will be more frequent. I understand that the Eastern Region are preparing plans to instal track circuits on the platform lines.

I have no doubt that Driver Sampher would have stopped his train short of the obstruction if his view had not been masked by the outgoing train. If he had applied the brake instantaneously when he saw the pilot engine ahead, his train might have stopped short, but he had been admitted by a clear running signal and I do not blame him for his momentary hesitation; I am satisfied also that he was properly alert.

In conclusion I should mention the first aid organisation at this comparatively small terminal station. I was told that there are more than a dozen members of the staff at Yarmouth Vauxhall who have passed the first aid examination by their own voluntary efforts. Three of them were present when the accident occurred to give immediate attention to the injured passengers.

I have the honour to be,

Sir,

Your obedient Servant,

W. P. REED,

Colonel.

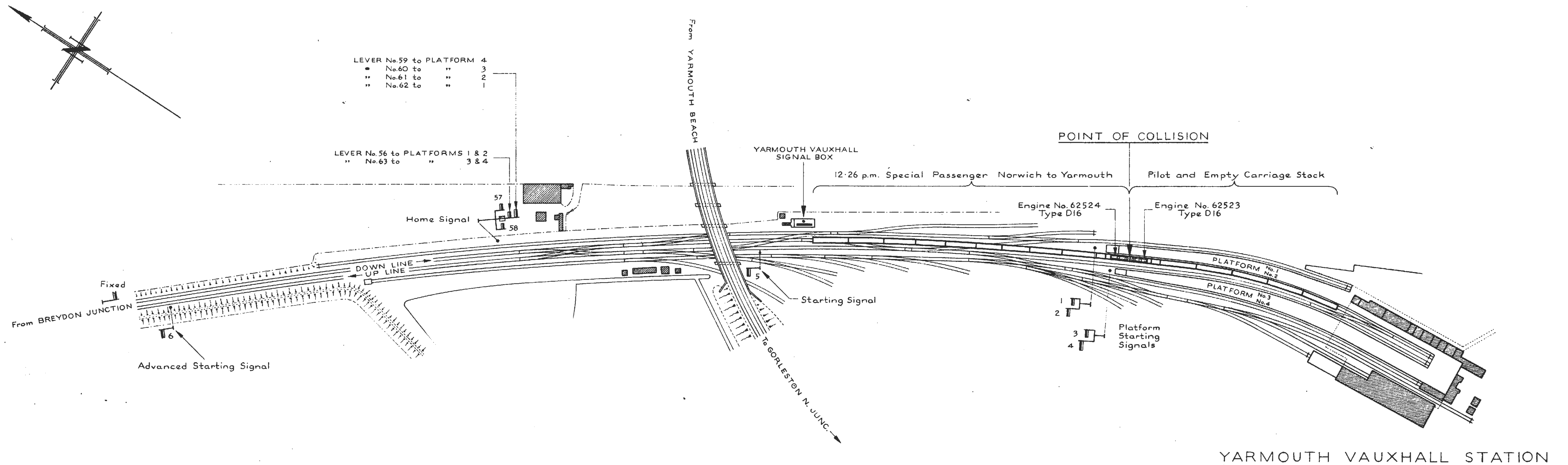
The Secretary,

Ministry of Transport and Civil Aviation.

EASTERN REGION

COLLISION AT YARMOUTH VAUXHALL

10th. AUGUST, 1956



SCALE :- 2 CHAINS TO 1 INCH

FEET 100 50 0 100 200 300 400 500 600 700 800 900 1000 FEET