

MINISTRY OF TRANSPORT & CIVIL AVIATION

## RAILWAY ACCIDENTS

# REPORT ON THE COLLISION which occurred on 25th January 1954 at SHEFFIELD, VICTORIA, STATION in the EASTERN REGION BRITISH RAILWAYS

LONDON : HER MAJESTY'S STATIONERY OFFICE

1954

SIXPENCE NET



### MINISTRY OF TRANSPORT AND CIVIL AVIATION, Berkeley Square House, London, W.I.

30th April, 1954.

Sir,

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I have the honour to report for the information of the Minister of Transport and Civil Aviation, in accordance with the Order dated 27th January, 1954, the result of my Inquiry into the collision which occurred at about 6.6 p.m. on 25th January, 1954, at Sheffield, Victoria, Station in the Eastern Region, British Railways.

The 11.16 a.m. express passenger train from Bournemouth to York was approaching Sheffield and was about to start from a signal at which it had been stopped, when it was run into heavily from the rear by a light engine running tender leading at 12 - 15 m.p.h; the latter had entered the section under the clear starting signal of the box in rear. The primary cause of the collision was a serious irregularity on the part of a signalman.

Nincteen passengers and four railway servants were injured of whom four passengers and three servants were conveyed to hospital but were not detained. The remainder received first aid on the spot or at the station, and a doctor who was travelling in the train rendered valuable assistance. Calls for ambulances and medical aid were sent out at 6.25 p.m. The first ambulance arrived as near as possible to the site within a very short time but it was correctly diverted to the station to which the undamaged part of the train carrying all the passengers proceeded, arriving at 6.55 p.m. Another doctor, the Sheffield City Police and the British Transport Commission police arrived on the scene quickly and rendered first aid and other assistance.

The train consisted of 8 coaches and with the engine weighed 384 tons. The rear three coaches were severely damaged. The underframe of the end vehicle was bent and the internal fittings were shattered but this coach and the one ahead of it, both of which were built in 1951, withstood the shock of the collision well though the bogie centre castings were broken and the bogies displaced. The buck-eye coupling between them was fractured and they parted to the extent of about 9 feet. The trailing end of the third coach from the rear, a restaurant car built in 1927, was stove in; the underframe and the body were distorted and one pair of wheels was derailed.

The light engine was of Class B 16 and with its six-wheeled tender weighed 124 tons in working order.

Both the main lines were blocked but normal working over them was restored soon after midnight. In the meantime passenger trains were worked over the adjacent goods lines.

It was dark but clear, and very cold.

#### Report

The sketch opposite shows the essential features of the layout, the position of the signal boxes concerned, Woodburn Junction and Sheffield No. 5, and the signals. Train working is by three position block instruments. The section signals are released by "Line clear" on the block instruments. The lines are not track circuited.

At about 5.15 p.m. on the day of the accident the block bell signals from Woodburn Junction box were not received correctly in Sheffield No. 5 box. Signalman G. J. Foulger of the latter box, therefore agreed with Signalman C. Portas of Woodburn Junction to treat the bells in both boxes as having failed and to introduce working under Block Telegraph Regulation No. 25.

Among other things this Regulation required the signalmen

- (i) to exchange "Line Clear" messages on the telephone and to operate the instruments accordingly,
- (ii) to stop all trains proceeding in both directions between the two boxes and to warn the drivers and guards of the situation and to instruct them to proceed cautiously,
- and (iii) to take immediate steps to have the failure rectified and when this was done, to reintroduce normal working.

According to Rule 38 of the British Railways Rule Book the section signal should not be lowered for a train in such circumstances and the driver should proceed into the section on the verbal authority of the signalman. The relevant extracts from the Regulations and the Rule are attached as an Appendix.

Foulger and Portas were complying with item (i) above, but they did not stop trains to warn the train crews nor did they comply with Rule 38. Neither could offer any explanation for their failure to do so. The lineman, who had been advised of the bell failure by Foulger, arrived in Sheffield No. 5 box at about 5.20 p.m., tested the bells and found them in order. Foulger did not, however, reintroduce normal block working because he thought that to do so would delay traffic at a very busy time. Consequently, emergency working was still in operation when Portas asked Foulger on the telephone for "Line Clear" for the Bournemouth train at 6.0 p.m.

The train was running about three minutes late. Owing to the short interval between trains at that time it was checked, but not stopped, at all the Woodburn signals, and it was stopped at Sheffield No. 5 home signal, at 6.1 p.m.

On approaching that signal, Driver C. E. Chapman sounded the engine whistle but he did not sound it after the train had been stopped, as required by Rule 55, although he knew that he should do so. The relevant extract from that rule reads as follows:—

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According to Chapman, the fireman was told to go to the box after about two minutes, but when he had gone only a short distance the signal was cleared and Chapman called him back. Chapman then released the brakes and was about to start the train when the collision occurred and the engine was pushed forward about 10 yards. The guard thought that the train had stood for 3-4 minutes before the collision took place. The tail lamp was alight.

Foulger had offered the train forward to No. 4 box when he received "Train Entering Section" from Woodburn Junction at 6.0 p.m., but it was refused. At 6.4 p.m. Portas was speaking to him on the telephone on another matter and enquired where the Bournemouth train was as his instrument was still at "Train on Line". Foulger looked at his instruments and saw that the one for the forward section was at "Line Blocked" and that the rear section instrument was at "Train on Line". He therefore formed the impression that the train had passed on to the station and that the block had been cleared, and that he had forgotten to give "Train out of Section" to Woodburn Junction. Consequently and without looking outside the box, he replied to Portas "The Bournemouth has gone" or words to that effect and replaced the instrument to normal, whereupon Portas asked Foulger for "Line Clear" for the light engine; this was given immediately and Portas cleared the section signal. The engine had been standing at that signal for about 4 minutes and Driver L. Morton started away at once.

After giving "Line Clear" for the light engine, Foulger offered it forward to the signalman in No. 4 hox who went straight to the telephone and asked about the Bournemouth train for which he had not yet given "Line Clear". Foulger realised immediately that he had made a serious mistake and asked No. 4 box to accept the train. "Line Clear" was given almost at once and Foulger cleared the home signal hoping that the train would start before the light engine reached it. He then rang Portas who told him the engine had left.

After starting from Woodburn Junction, Driver Morton and his fireman were keeping a careful look out for No. 5 box home signal, which was very difficult to see on account of the erection of steel work for the forthcoming overhead electrification. Neither of them saw the tail lamp of the train before the engine struck it. They estimated that the engine was travelling at 4 - 6 m.p.h. but this was inconsistent with the extent of the damage which suggested that the speed was in fact 12 - 15 m.p.h.

Foulger was informed of the collision by telephone from the sidings at about 6.10 p.m. and sent "Obstruction Danger". The Control was informed by telephone from the sidings at about the same time, but it was not until about 6.20 p.m. that they were told by the Yard Inspector, by telephone from No. 5 box, that there were casualties. As has been stated calls for assistance were sent out at 6.25 p.m.

#### CONCLUSIONS

The primary cause of this accident was the action of Signalman Foulger who gave "Train out of Section" for the Bournemouth train when it was still standing at his home signal. The block instruments indicated the correct state of affairs and he had no excuse to offer for assuming that the train had gone and that he had forgotten about it. He had only to look out of the box to have seen the lights of the train. At the time the working of the box was heavy and I think that he had allowed the block bell failure to upset him. This should not have been the case for he is an experienced man of 63 years of age and he has been a signalman for over 30 years, with a clear record.

Signalmen Foulger and Portas both disregarded Rule 38 and parts of Regulation 25 for which there was no excuse. If Portas had warned the driver of the light engine to proceed cautiously the accident might have been avoided. Again, if Foulger had reintroduced normal working when the block bells were tested and found in order, he might have recovered his composure and not forgotten that the train had not passed.

Rule 55 required Driver Chapman to whistle when the train had been stopped at the home signal and if he had done so Foulger might have remembered the train. Chapman's judgment of time was also faulty for I think it must have been 3-4 minutes before he told the fireman to proceed to the box. It is possible, however, that even if the fireman had carried out that part of Rule 55 after waiting for 2 minutes, he would not have arrived at the box in time to prevent the accident.

I cannot criticise Driver Morton for failing to see the tail lamp of the train. The light engine was running tender leading and both he and his fireman were looking for a signal which it was very difficult to see. I am glad to say that the signal was repositioned shortly after the accident.

#### REMARKS

This accident could have been prevented if any one of three experienced railwaymen, two signalmen and a driver, had done what he knew was required of him. It was the direct result of the failure of a signalman who, under some stress, ignored the clear information given by the block instruments and assumed that he himself had forgotten to operate them correctly.

Controls which will prevent failures of this type are being installed as rapidly as circumstances permit throughout the main lines of British Railways and, in fact, the line on which this accident occurred is in the process of being so equipped in connection with electrification. There are, however, many signal boxes on important lines where it will be some time before such controls can be provided, and in such cases the safety of traffic must continue to depend on the integrity of the signalmen.

It would appear that in this case the signalmen concerned were attaching more importance to the avoidance of delay to trains than to safety. I am satisfied, however, that it is continually impressed on signalmen generally that when there is any doubt whatever safety must come first.

It is to be regretted that there was delay in calling for assistance amounting to about 15 minutes. When the calls were made they were answered promptly. When an accident occurs at a distance from a box or a railway centre it may be some time before assistance can be summoned, but delay is not to be expected when it occurs at a busy station such as Sheffield.

There are not as many railway servants trained in first aid at Sheffield as at other comparable stations and there were no such staff in the nearby sidings at the time of the accident. Steps were already being taken to remedy the position and in fact the station master was attending a class when the accident occurred. I hope that the need for the immediate rendering of first aid to the public or to fellow-workers injured in an accident of any sort will be recognised by the railway staff in the area and that more volunteers will be forthcoming for training.

> I have the honour to be, Sir, Your obedient Servant, D. McMULLEN, Colonel.

The Secretary, Ministry of Transport and Civil Aviation.

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EXTRACT FROM THE LONDON & NORTH EASTERN RAILWAY REGULATIONS FOR TRAIN SIGNALLING ON DOUBLE LINES OF RAILWAY BY THE ABSOLUTE BLOCK SYSTEM.

Regulation 25.—Failure of Instruments, Bells or Gongs.—In the event of any failure of the ...... bells or gongs, so that the necessary signals cannot be forwarded and received in the ordinary way, the following instructions must be observed:—

> (ii) The Signalman at whose box the ..... bells or gongs have failed must advise the Signalman at the box in advance of the failure by speaking instrument

(iii) When the bells or gongs only, ..., have failed and a speaking instrument is available, the Signalman must, unless instructions to the contrary are given, send the necessary bell signals as messages on the speaking instrument ...

When the bells or gongs only have failed, the block instruments must be worked in conjunction with the speaking instruments.

#### EXTRACT FROM THE BRITISH RAILWAYS RULE BOOK

(xiii) When a train is required to enter a section during failure of instruments and/or bells and the Driver is instructed verbally by the Signalman (Block Regulation 25).