



MINISTRY OF TRANSPORT AND
CIVIL AVIATION

RAILWAY ACCIDENTS

REPORT ON THE COLLISION

which occurred on

24th March 1956 at

OLD TRAFFORD JUNCTION

in the

LONDON MIDLAND REGION

BRITISH RAILWAYS

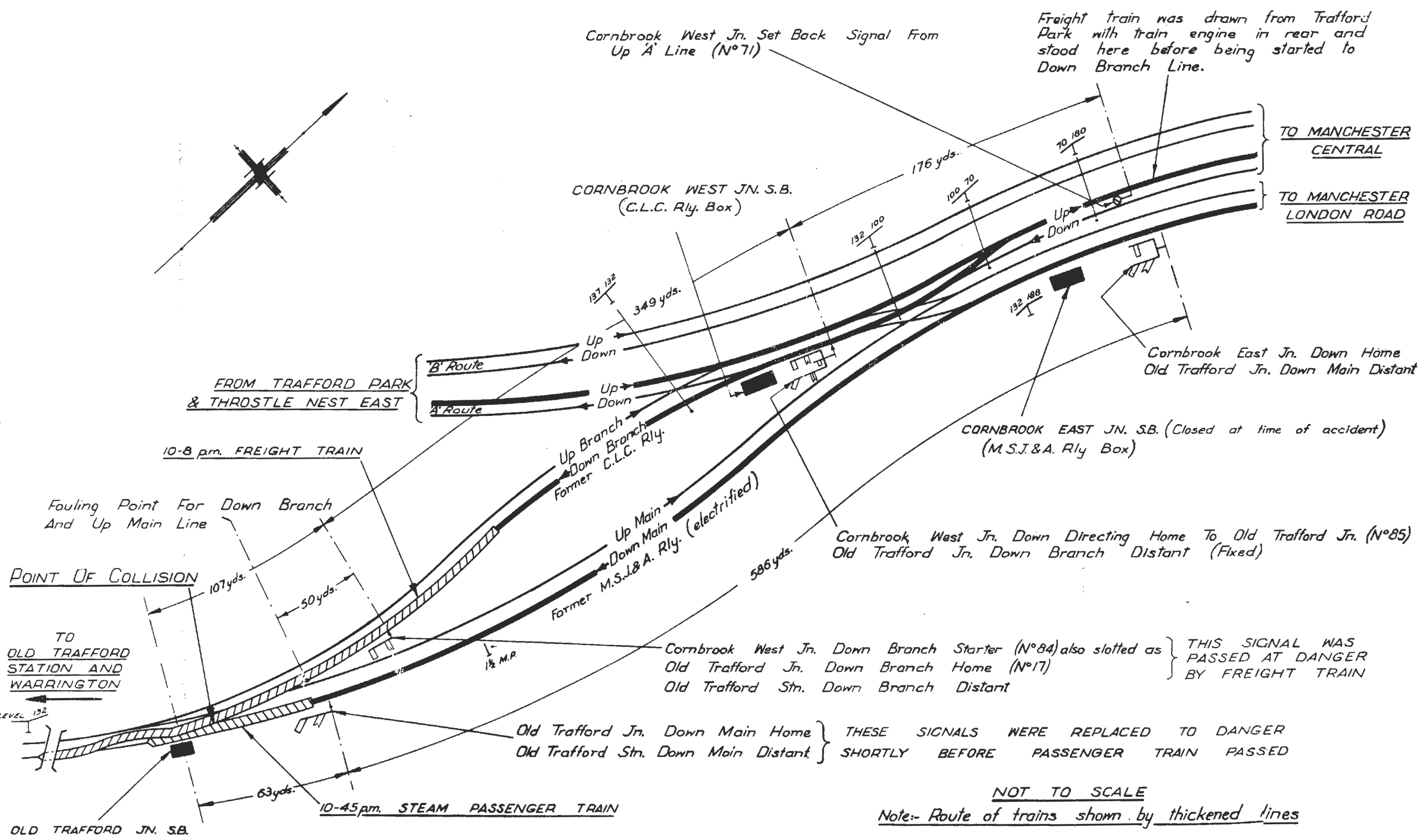
LONDON: HER MAJESTY'S STATIONERY OFFICE

1956

ONE SHILLING NET

Cornbrook West Jn. Set Back Signal From Up 'A' Line (N°71)

Freight train was drawn from Trafford Park with train engine in rear and stood here before being started to Down Branch Line.



SIR,

11th May, 1956.

I have the honour to report for the information of the Minister of Transport and Civil Aviation in accordance with the Order dated 26th March 1956, the result of my Inquiry into the collision which occurred at about 10.50 p.m. on Saturday, 24th March, 1956, at Old Trafford Junction on the former Manchester, South Junction and Altrincham double track line of the London Midland Region, British Railways.

The 10.45 p.m. steam passenger train from Manchester, London Road, to Warrington was travelling on the Down (electric) main line and was approaching the converging junction under clear signals at about 45 m.p.h. when the home signal was replaced to danger in front of it. The signalman had taken this action when he saw that the 10.8 p.m. loose coupled freight train from Trafford Park to Saltney (via Cornbrook West) was about to pass the junction Down Branch line home signal at danger. The driver of the passenger train saw the Main line signal return to danger and made an emergency brake application; he had reduced the speed to about 15 m.p.h. but was unable to prevent a sidelong collision with the fourth or fifth wagon of the freight train which had run on to the Main line and was travelling at much the same speed.

Three of the forty passengers in the 10.45 p.m. train received slight injuries, and they were taken home by car after receiving first aid treatment. In addition, the guard of the freight train was slightly injured. Immediate calls were sent for assistance and the Police, Ambulance and Fire services arrived very promptly.

The passenger train consisted of three coaches and it was drawn by a Class 5 mixed traffic engine. The engine became derailed and tilted over against the junction signal box which was almost demolished. The leading coach was also off the rails and its right-hand side was ripped away by contact with the goods vehicles. The freight train comprised 42 vehicles and a brakevan hauled by a Class 8F "Austerity" engine with a 2-8-0 wheel arrangement. The tender and the leading seven vehicles were derailed and damaged in varying degrees and they blocked both the lines.

Breakdown cranes were ordered from Longsight, Crewe and Gorton and the engines and vehicles were railed by 6.15 p.m. on Sunday evening. The lines could not, however, be re-opened for traffic until 5.0 a.m. on Monday morning after the considerable damage to the permanent way and the signalling equipment had been repaired, and a temporary block post had been erected to replace the signal box. In the meantime electric trains were terminated at Warwick Road and a special bus service was introduced between there and Manchester, London Road. Steam trains which normally pass through Old Trafford Junction were diverted by Throstle Nest Junction, Heaton Mersey and Skelton Junction.

The night was fine and clear.

DESCRIPTION

The layout of the lines and the positions of the relevant signals in the vicinity of Old Trafford Junction and Cornbrook West boxes are shown in the sketch opposite. In the Down direction the former Manchester, South Junction and Altrincham (M.S.J. and A.) Railway Main line falls at 1 in 132, and the Branch line, which is a part of the former Cheshire Lines Committee (C.L.C.) Railway, falls at 1 in 137 to Old Trafford Junction. Just beyond the junction the lines pass under a bridge; they continue to fall at 1 in 132 for about 100 yards and then become level. On the Branch line the junction is protected by a signal situated 107 yards from the box and 50 yards from the fouling point between the Up Main and Down Branch lines which is dually controlled as the Old Trafford Junction Down Branch home signal No. 17, and the Cornbrook West Down Branch starting signal, No. 84. Both that signal and the junction Down Main line home signal have distant signal arms for Old Trafford Station underneath them and all their lights are electric, and the distants show no lights when the stop arms above them are at danger. Both the signal posts are on the left-hand side of the line to which they apply, the stop arm of the Branch line signal being 22 ft. 6 ins. and that of the Main line signal 16 ft. above rail level, and the lights can be seen from the footplate of an engine approaching Old Trafford Junction on the Branch line before it passes Cornbrook West box. They again come into view almost simultaneously as the engine passes the box and, except when first one and then the other is obscured momentarily by a telegraph pole, they remain in view continuously showing the same clear "pattern" to the driver as the engine descends the gradient.

The standard block regulations are in force on the M.S.J. and A. line but not on the C.L.C. line. The instructions for working the trains over the latter allow the signalman at Cornbrook West box after having offered a train to Old Trafford Junction and having had it refused, to send the train forward to the dually controlled signal under a special bell signal 1-3-3. The signalman at the junction cannot refuse a train when sent forward in this way, even though he may have accepted trains on the M.S.J. and A. line and cleared his signals for them, but he is required to acknowledge the bell signal and place the commutator of his block instrument to Train on Line.

REPORT

The 10.45 p.m. passenger train was on time, and the signalman at Old Trafford Junction had received Train Entering Section at 10.48 p.m. and had cleared the distant and home signals; the Old Trafford Station distant signal underneath the home signal had also been taken off.

The freight train was drawn from Trafford Park by a pilot engine, with the train engine in rear, past Cornbrook West box on to the Up "A" line clear of set-back signal No. 71 where it arrived, at 10.29 p.m., 12 mins. behind its time. In that position the train engine was about 180 yards from the Cornbrook West home signal No. 85.

Signalman A. Smith of Cornbrook West box asked Signalman J. Jackson of Old Trafford Junction on the telephone whether he would accept the freight train, but Jackson replied that he could not do so until certain M.S.J. and A. trains had passed. At 10.45 p.m. Smith offered the freight train on the block instrument to Jackson who refused it. Smith therefore sent the 1-3-3 signal to Old Trafford Junction which was acknowledged by Jackson, and after a minute or two cleared signal No. 71 for the freight train; he also cleared signal No. 85 as the engine was passing over the crossover from the Up to the Down "A" line.

According to Smith the freight train started slowly in the normal way for a train which is drawing ahead to the dually controlled signal, but when it was about half way past Cornbrook West box it seemed to gather speed. He was expecting the wagons to begin to "buffer up", indicating that the driver was stopping at the signal, but this did not happen; it was, however, too late for Smith to take any action. Smith considered that he had complied with Rule 39(a) in connection with the clearing of signal No. 85 and he added that the signalmen in Cornbrook West box had received instructions from an inspector not to detain trains at the signal. Smith agreed, however, that the driver of the freight train could not tell whether he was being drawn ahead to the dually controlled signal or whether he had a clear run through Old Trafford Junction.

Jackson noticed the freight train approaching on the Branch line and thought that it would stop at the dually controlled signal which was at danger, but when it was close to the signal he realised that it would not do so; at the same time he saw the 10.45 p.m. passenger train approaching on the Down Main line, some 300 to 400 yards away. He saw that a collision was inevitable and immediately put the Main line distant signal to caution and the home to danger. He had already accepted an Up electric passenger train and he sent the Obstruction Danger bell signal to Old Trafford Station box at 10.50 p.m., as the collision occurred and as the engine struck his box.

The driver and fireman of the passenger train both saw the home signal light change from green to red when the engine was 50—100 yards from it and the driver made a full brake application. He had previously been travelling at the normal speed of 40-45 m.p.h. and he thought he had almost stopped the train before the collision; the guard, however, was of the opinion that it was still travelling at 10-15 m.p.h. Signalman Jackson estimated the speed of the passenger train at the time of the impact as 20-25 m.p.h. and of the freight train as 10-15 m.p.h.

Driver G. T. Burr of Trafford Park motive power depot was in charge of the engine of the freight train. He said that after arriving on the Up "A" line at Cornbrook West and waiting some 20 minutes, signal No. 71 was lowered. He released the engine brake and allowed the train to gravitate and in fact he had not opened the regulator before the accident. Soon after the train had started, he saw that signal No. 85 had been taken off but he did not know whether the train was being drawn ahead or whether it was being given a clear run through Old Trafford Junction. He did not notice the Old Trafford Junction signals until the engine had passed Cornbrook West box and then he saw only two green lights, one below the other. He took these to be Branch line signals and to indicate that his train had a clear run through the junction and Old Trafford Station. Burr stated that even so it was necessary to drive the train with considerable care down the gradient and he was controlling it with the steam brake, which he began to release as he neared the junction. After passing through the trailing points the tender became derailed under the bridge and the train stopped. He had not seen the passenger train and thought that the derailment was the result of some track defect. He said that it was not until he had returned from Old Trafford Station, to which he had gone to protect the lines, about an hour later that he realised he must have passed the signal protecting the junction at danger.

Burr definitely thought that he saw only the two green signal lights which he took to apply to the Branch line. He agreed that both the Branch and the Main line junction home signals could be seen clearly after passing Cornbrook West box and he was unable to explain why he had not seen all of them on this occasion. He was also insistent that he was looking out through the front window of the cab except for a short while when he turned round to see how the fireman, who was on that class of engine for the first time, was managing the fire, but he had not allowed himself to become temporarily blinded

by looking into the fire. He said that he and the fireman were not talking on the footplate, and the fireman confirmed this. Burr added that he had had adequate rest before taking up duty at 8.35 p.m. that evening, and that he was not tired, and also that he had nothing on his mind that might have distracted his attention.

Burr said that he and all the other drivers in the link had complained about the dually controlled signal. The complaint was not about its clearness but that the overrun beyond it to the fouling point with the Up Main (electric) line was so short. His complaint had been made to an inspector who had since died. Signalmen Smith and Jackson both confirmed that they had heard of such complaints.

Driver Burr is 55 years of age and had been a driver for six years with a good record. He "signed for the road" in January, 1955, and had worked over it for a period of a week in every twelve weeks. He had in fact worked the same train from the Monday to the Friday before the accident; on Monday it had been drawn forward and stopped at the dually controlled junction signal but on the other nights it had been given a clear run through the junction. Burr has been medically examined and he was found fit and his sight was good. He was an excellent witness and gave his evidence in a straightforward way and he did not attempt to excuse himself.

Guard F. Phillips said that the freight train started slowly from the Up "A" line at Cornbrook West and he thought it was being drawn ahead to the dually controlled signal on the Branch line, but when it was about half way past the box it appeared to gather speed. He then partially released the van brake, which he had up to that time kept hard on, but the couplings remained tight. He said "I was under the impression that we were right away and I was releasing the brake a bit more when I saw the passenger train pass the van and put the brake hard on again". He thought the speed had reached about 15 m.p.h. when the collision occurred. He stated that he could not see any of the junction signals from the brake van.

CONCLUSIONS

This accident was the result of a failure on the part of an experienced driver in charge of the freight train engine. He did not see the signal applying to the Branch line on which the train was travelling, and he accepted the signals on the adjacent Main line, which were clear for the passenger train, as his authority for proceeding through the converging junction. All the signals are well sited and have good lights and they form a clear pattern which does not change. He was insistent that he was looking out the whole time but I am unable to accept that statement because if he had done so he could not have avoided seeing the red Branch line signal light. The only explanation I can offer is that when he first looked for the signals after passing Cornbrook West box, the Branch line signal was momentarily obscured by a pole with the result that he saw only the green Main line signals, and that he did not look out again. At such places drivers are expected to locate their proper signal in the pattern of all the signals, but he failed in that respect.

The results of the accident might have been much more severe but for the very prompt action by Signalman Jackson of Old Trafford Junction who lost no time in replacing the Main Line signals to danger when he saw that the freight train was about to foul the junction.

REMARKS

The signalling arrangements on the Down line between Cornbrook West and Old Trafford Junction were altered during 1953 and 1954. Before then there were separate Cornbrook West starting and Old Trafford Junction home signals: the former was only 38 yards and the latter only 16 yards from the fouling point between the Down branch and the Up main line. The practice, which had existed for many years, was for trains to be sent forward by the signalman at Cornbrook West to the starter without any information to the signalman at Old Trafford Junction. As mentioned earlier in this Report, there is now only one signal dually controlled from the two boxes, and it is situated 50 yards from the fouling point. Furthermore, although the signalman at Old Trafford Junction still cannot refuse to allow a train being sent forward from Cornbrook West to that signal, he is informed about it and is required to place his block instrument at Train on Line.

The reason for this unusual arrangement has been to prevent trains being held on the busy "A" route C.L.C. Main lines at Cornbrook West, and this is understandable. I am, however, in sympathy with the point of view of drivers, particularly those of unfitted freight trains, who consider that in view of the fairly steep falling gradient on the "A" route Main lines and on the Branch line, the over-run beyond the dually controlled signal is dangerously short for such movements.

I rode on the footplate of an engine drawing a freight train which was of much the same length as the one involved in the accident. The driver travelled extremely cautiously down the gradient, scarcely exceeding 2 m.p.h., and had no difficulty in stopping at the signal, but as the train stopped an Up and a Down electric train, each travelling at about 50 m.p.h., passed each other on the junction, and they appeared to be very close to the engine.

There is no record of any previous accident at the junction and I attribute this to the great care which has been exercised by drivers who recognise the danger, and also, to some extent, to good fortune. With only a slight lack of care it would be possible in adverse weather conditions for the wheels of an engine to "pick up" and for it to slide past the signal and foul the electric lines, on which there is an intensive service.

I have discussed this matter with the London Midland Region authorities and I am glad to record that they have agreed to discontinue this method of working for all trains on the Down Branch line. I can see no objection to it on the Up line where it is also in force, as the gradient is rising.

I have the honour to be,

Sir,

Your obedient Servant,

D. McMULLEN,

Colonel.

The Secretary,

Ministry of Transport and Civil Aviation.