MINISTRY OF TRANSPORT

RAILWAY ACCIDENT

REPORT ON THE COLLISION

that occurred on

3rd July 1963

between

DESBOROUGH and GLENDON

in the

LONDON MIDLAND REGION
BRITISH RAILWAYS

LONDON: HER MAJESTY'S STATIONERY OFFICE
1963

PRICE 1*s.* 3*d.* NET

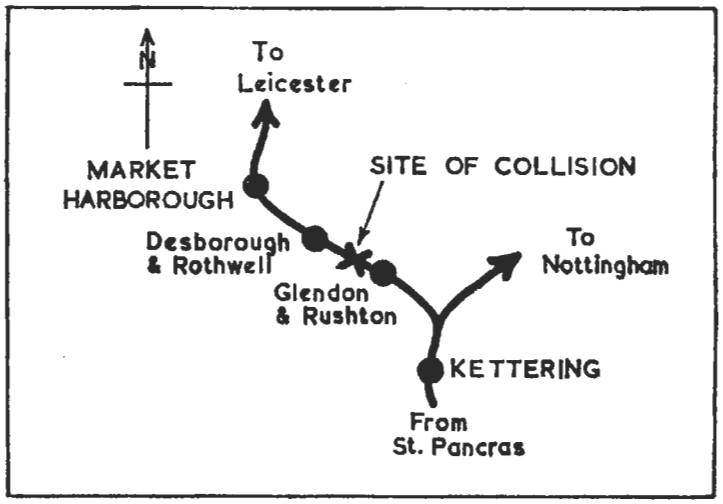
COLLISION between DESBOROUGH and GLENDON, 3rd July 1963

75m 1157 yds — Glendon & Rushton Signal Box

75m 1566 yds — Glendon Up Home Signal (No. 15)

T.C. 1080

76 M.P.



76m 1176 yds — Site of collision

76m 1372 yds — Glendon Up Distant Signal (No. 16)

T.C. 4947

77 M.P.

77m 119 yds — Gaultney Wood Up Intermediate Block Home Signal (Desborough No. 18) (equipped with telephone)

T.C. 1201

UP

DOWN

77m 1122 yds — Desborough Up Starting Signal (No. 14)
Gaultney Wood Up Inner Distant Signal (No. 19)

T.C. 66

77m 1650 yds — Desborough Up Home Signal
Gaultney Wood Up Outer Distant Signal (R. 19)
Desborough & Rothwell Signal Box

78 M.P.

MINISTRY OF TRANSPORT,
ST. CHRISTOPHER HOUSE,
SOUTHWARK STREET,
LONDON, S.E.1.

4th October 1963.

SIR,

I have the honour to report for the information of the Minister of Transport, in accordance with the Order dated 3rd July 1963, the result of my Inquiry into the overtaking collision between a passenger train and a freight train on that day at about 3.49 a.m. between Desborough & Rothwell station and Glendon & Rushton station on the Midland route of the London Midland Region, British Railways.

The 1.0 a.m. Class 4 Up express freight train from Birmingham (Lawley Street) to London (Brent) had stopped in the section because of brake trouble; this had been overcome and the train was about to start when it was struck at about 40 m.p.h. by the 12.5 a.m. Class 1 Up passenger train from Manchester to St. Pancras which was travelling under clear signals. This train had been wrongly admitted into the section by the combined fault of the signalmen in the signalboxes on either side.

The heavy and solid diesel locomotive of the passenger train crumpled the brake van and last four wagons of the freight train before it stopped 62 yards ahead of the point of collision; the bogie brake van behind the passenger train engine was little damaged in the course of the not very severe retardation over this distance, and the rest of the train was virtually intact. Only two of the 70 passengers were hurt, both slightly, and the guard of the passenger train also suffered minor injuries. The guard of the freight train heard the passenger train approaching and escaped.

Both lines were blocked by debris, and it was necessary to take the passengers by bus from Desborough to Kettering, the station south of Glendon, after the rear part of the passenger train had been drawn back. The passengers were able to continue their journey southwards from Kettering in a train leaving at 6.38 a.m. Recovery and repair work was put in hand promptly; the Down line was opened at 12.50 p.m. on the 4th July and the Up line 3½ hours later.

The weather was dry but hazy; it was not yet daylight.

DESCRIPTION

The Site and Signalling

1. The diagram opposite shows the general arrangement of the route between Desborough signalbox at MP 78, and Glendon signalbox between MP 75½ and 75¾, and the position of the Up line signals and relevant track circuits. The signalboxes on either side are Desborough North and Glendon North Junction. In the Up direction, from Desborough towards Glendon, the double track route is on falling gradients for most of the way varying between 1 in 200 and 1 in 114, with short level lengths. Curves are easy, of about 1 mile radius or more, and there is a left-handed one of 1½ miles radius leading up to the point of collision at 76 m. 1176 yds. The formation in the area of collision is in cutting and the track is of 109 lbs. flat-bottom material on wood sleepers. There was a speed restriction of 15 m.p.h. in force on both lines near Glendon for a quarter of a mile on either side of MP 76, for formation and drainage work.

2. The block instruments at both Desborough and Glendon boxes are of the three position, ex-Midland, single needle, pegger type. The pegger handle when turned to the Line Clear or Train on Line position is held there by a trigger catch under the handle. The diagrams above the frames are not illuminated, and the condition of the track circuits in the area of each box is shown by banner indicators attached to the block instrument shelf. Train registers, in which the times of block signals are booked, are maintained at both boxes.

3. The signals are upper quadrant semaphores interspersed with multi-lens colour lights where renewals have taken place. There are intermediate block signals at Gaultney Wood between the two signalboxes, the Up line ones being worked from Desborough and the Down from Glendon. The Up line is track-circuited from Desborough to the colour light intermediate block home signal (Desborough No. 18) which has a telephone, at 77 m. 119 yds., and again from this signal to Glendon Up distant (Glendon No. 16) at 76 m. 1373 yds.

4. Glendon Up home signal, No. 15, at 75 m. 1566 yds. has a short berth track circuit commencing at MP 76 which extends for 409 yards beyond the signal as an overlap track circuit. When occupied, it prevents the lever being restored fully in the frame, and the lever must be in the frame and the semaphore arm at Danger before Line Clear can be given to Desborough. There is sequential interlocking at Glendon and, for the section ahead, there is the Line Clear (one pull) Block control on the Up starting signal.

5. The Gaultney Wood intermediate block home signal, is placed at Red by the track circuit ahead occupied, and lever No. 18 in Desborough box for this signal is held locked by this track circuit occupied. The lever is also locked by the Block and is released for one train to pass when Line Clear is received from Glendon. Desborough Up starting signal, lever No. 14, is locked normal in the frame when either of the two track circuits ahead are occupied; also, unless Line Clear (one train) has been received from Glendon it cannot be released unless No. 18 lever is locked normal and that signal is at Red and also No. 19 distant signal arm on.

6. The Regulations for Train Signalling lay down detailed codes of procedure to be followed by signalmen. They require amongst other things that all block signals shall be transmitted if possible by prescribed bell signals which must be acknowledged, generally by repetition, and that the times must be entered in the train register. Regulation 1 gives details of the procedure for exchanging bell signals for Line Clear, Train Entering Section, and Train Out of Section, and the actions to be taken in respect of the block instruments and signals. The procedure for cancelling a Line Clear or Train Entering Section signal is in Regulation 2(a). Once again prescribed bell signals must be exchanged and the block indicator placed to the normal position. There are variations of this procedure for special conditions but they were not relevant to this accident. Regulation 12 requires that Obstruction Danger must be sent to the box in rear when an obstruction occurs, and lays down details regarding the circumstances in which it must be sent.

7. Regulations 1 and 2(a) are given in full at Appendix I.

The Trains

8. The freight train, which was standing with the engine at about 76 m. 823 yds. was inside the Glendon distant signal and clear of the track circuit which controls the Gaultney Wood intermediate home signal. It comprised a type 4 diesel-electric locomotive weighing 136 tons in working order and 28 wagons and brake van, with a total length of 353 yards. The locomotive was equipped with the air brake and the remainder of the train with the vacuum brake. As already mentioned the brake van and last four wagons were crumpled and destroyed in the collision, the two vans in front of these vans derailed and much damaged, as was the leading wagon of the train, and there was light damage to a number of the remaining wagons. The rear of the engine suffered slight damage to buffers, jumper cables, and pipe work.

9. The passenger train consisted of 7 bogie vehicles with 7 four-wheeled vans in rear drawn by a B.R. Sulzer type 4 diesel-electric locomotive similar to that of the freight train. The driving cab of this type of engine is set back from the nose by about 4 ft. The first bogie vehicle behind the engine was a brake van as was the sixth. The buck-eye coupling was in use between bogie vehicles. The length of the train over buffers was 225 yards. The brake power of the locomotive was 78% of the weight of 136 tons, and of the coaches and vans 88% of the weight of 286 tons.

10. The engine suffered fairly severe damage at the leading end to buffer beams, external gear, bogie frame, and axle boxes and swing links, and the cab was also damaged though not badly stove in, and the equipment in it displaced and broken. The damage to the leading bogie van was mainly to the forward end and was light; the buck-eye coupling between this van and the first passenger coach was also damaged.

11. Damage to track was not heavy; two 60 ft. lengths required to be relaid in the Up line and three in the Down. About 200 yards of signalling cable required replacement, and also a number of track circuit bonds.

Report

12. *Driver S. Foskett* of the freight train said that he had taken it over at Wigston South Junction, which is about 16 miles from the scene of the collision. The previous driver had warned him that there was some difficulty in maintaining vacuum, but he had found it satisfactory until he applied the brake for the first time at Glendon Up distant signal which was at caution. When he tried to re-create vacuum after his speed had dropped sufficiently he was unable to do so, and his train stopped a short distance beyond the signal. He sent the fireman back to tell the guard to protect the train, and got down himself to disconnect the vacuum pipe and to test the equipment on the engine. Finding this satisfactory he reconnected the vacuum pipe and then was able to re-create vacuum, though slowly. He called the fireman back and was awaiting the signal from the guard to start the train when he felt the collision. He said that the train might have been standing for about 15 minutes. He sent the fireman at once to protect the Down line and went to investigate; not finding the guard he decided to go forward with the engine after uncoupling and to report the accident at Glendon. This he did, passing the home signal at Danger after sounding the horn and not getting the signal lowered. At the signalbox he found that his fireman had already arrived. He reported the accident to Control and signed the train register. Foskett did not question the signalman about how the collision had come about.

13. *Passed Cleaner A. D. Denton* was the second man in the engine of the freight train. He confirmed that he was told by his driver to meet the guard and to tell him to protect the train. He walked the whole length of the train to the brake van where he found the guard and told him to protect the train as the brakes had failed. At about this time he heard the brakes becoming released. He did not catch the guard's reply but they both walked back along the train until they met the driver whom he then accompanied back to the footplate. After the collision he ran most of the way to Glendon, about one mile, and told the signalman to stop all traffic. The signalman said to him that he already knew about the collision as a guard had reported it by telephone.

14. *Goods Guard C. S. Scarlett* of the freight train said that he walked up the train on the cess side and saw Denton walking down on the other side between the tracks (this was the correct side), and walked back to his van parallel with Denton. He then walked up the train with him to meet the driver and to be told that vacuum was being re-created. When asked whether he had spoken to Denton when he saw him walking down the train on the other side he said that he had not done so. He went back to

his van, and as soon as he had climbed into it he heard the passenger train coming, jumped out, and ran up the side of the cutting. He had the impression that the brakes were applied before the collision. Scarlett then went to the rear of the passenger train to speak to the guard, took some detonators and went back to protect the line. On the way he spoke to the Desborough signalman from the intermediate block home signal telephone and told him that the accident had blocked both lines.

15. *Driver J. E. Birkin* and *Fireman C. G. Hulbert* of the passenger train both said that they saw the intermediate block signals at clear and the Glendon distant signal at caution. Driver Birkin said that his speed had been not more than 50 m.p.h. as he was limited to this speed because of short wheelbased vans on the train: he reduced speed a little on seeing the Glendon distant signal at caution, and knowing also about the engineering restriction ahead. He made a full brake application when the tail lamp of the freight train came into view at a short distance as he ran out of the curve leading to the cutting in which that train was standing. He warned his fireman and they both lay on the floor before the impact. The front and side windows of the cab were broken but neither man was cut by the safety glass. Both men thought the speed had been reduced to about 40 m.p.h. at impact. When they had collected themselves after the train had come to a stand Driver Birkin sent the fireman forward to protect the other line and walked back along the train to see to the passengers. Hulbert went along the Down line towards Glendon signal-box after getting detonators, met the driver of the freight train who was returning to his engine after uncoupling, and accompanied him to Glendon.

16. *Guards C. Davy* and *P. W. Slater* of the passenger train took appropriate action after the collision to protect the train, report the accident and to look after their passengers. *Station Masters C. J. Breeze* of Desborough and *J. A. Beswick* of Glendon were each called about half an hour after the accident; they acted efficiently in dealing with the emergency and making arrangements for rescue and relief, and in investigating the actions of the signalmen in the boxes within their respective responsibility. Their accounts of these actions do not conflict materially with those of the signalmen which are given in the following paragraphs.

17. The evidence of the signalmen at Desborough and at Glendon is closely concerned with entries in their respective train registers. Extracts from these registers and from those of the signalboxes on either side are at Appendix II.

18. *Signalman G. W. Milton* in Desborough box said that the freight train passed in normal fashion. He had obtained Line Clear for it at 3.28 a.m. and had sent Train Entering Section to Glendon at 3.31 a.m., and Train Out of Section to Desborough North, the box in rear, at 3.32 a.m. Fifteen minutes later the passenger train was offered from Desborough North and he accepted it at 3.46 a.m. as recorded in his register. He then went to the Up end of the frame and saw the block instrument needle for the section between his box and Glendon at Line Clear, and spoke to the signalman at Glendon to ask why it was in that position. He was told that the freight train had been accepted but Milton replied that it had passed and asked the Glendon signalman to accept the passenger train. This the Glendon signalman agreed to do, and Milton was given a fresh Line Clear release for the passenger train at 3.46 a.m. Milton had not entered Train Out of Section for the freight train in his train register and could not recall having received that signal. He did not think of consulting his register when he saw the block instrument for the section to Glendon at Line Clear, nor could he recall whether his Train Entering Section signal for the train had been acknowledged by the Glendon signalman. He agreed that he could not have looked at his block instrument to see that the needle had turned to the Train On Line position after he had sent the message. He said that he had looked out of the window to watch the train pass as soon as he had given the message, and had then started his supper which consisted of sandwiches together with a pot of tea which he had brewed in the signalbox.

19. On receipt of Line Clear from Glendon for the passenger train, which was given simply by a movement of the pegger handle to normal and back to Line Clear, and not after the exchange of the prescribed bell signals, Milton pulled off his signals in the normal manner and, as he said, "the express went by travelling at a safe speed". He recorded "Train Entering Section" as at 3.49 a.m. He gave the matter no further thought until he heard of the collision, a few moments later on the telephone. After this he failed to send the Obstruction Danger message as required by the Block Regulations.

20. I asked Milton whether he was prompt in making entries in the register as each event took place, or whether through pressure of work he sometimes made entries in a group. He assured me that there was no undue pressure of work and that he was prompt in making entries. He was in good health and had no worries on his mind. Milton is 59 years of age and has 30 years railway service: he had worked in Desborough signalbox for about 5 years, after working in other boxes in the area.

21. *Relief Signalman R. J. Day* on duty in Glendon box said that he had accepted the freight train at 3.28 a.m. and had recorded it in his register; he did not receive Train Entering Section for it but he made the entry of 3.31 a.m. in his train register because he heard the time mentioned on the omnibus telephone circuit by the signalman at Desborough North who joined in a later conversation between him and Milton to say that the freight train had passed at 3.31 a.m. This was after he had accepted the passenger train but before the accident. He said that if he had been given Train Entering Section for the freight train he would have put the pegger instrument to Train On Line, and the linked instrument at Desborough would also have moved to that position. When Milton asked him about the Line Clear position of his block instrument he replied that he had the freight train booked; he had then understood from Milton that this train had not been offered and that a slow freight train, the 2.55 a.m. Wigston—Brent, which passed at 3.22 a.m. had been the last train. He then said "pull off then, my instrument is at 'Line Clear'." I pointed out to him that there is a "one train" control between the block instrument and the signal lever at Desborough and that he must have restored his instrument to normal and

have turned it again to Line Clear to release the intermediate block section signal; he agreed that he might have done this without conscious thought. It is to be noted that the trigger under the pegger handle works very easily as the instrument is old and free working, though the trigger holds the handle securely enough in the Line Clear and Train On Line positions; no conscious effort would therefore have been required to pull the trigger, turn the handle to normal, and replace it again to Line Clear.

22. Day agreed that he was given the Train Entering Section message for the passenger train and that he acknowledged it and turned his instrument to Train On Line, though he failed to record it in his register. It seems to have been at about this moment that he had further doubts about the freight train and asked again about it on the telephone. For this reason he did not clear his signals for the passenger train. After the accident he failed to send the Obstruction Danger message.

23. Day blamed his uncertainty about the fitted freight train on the new type of train register book in which the Up and Down train pages are on opposite sides to the old books. He said that he had not got fully into the habit of using the new book, though he had been using it at this box where he had worked every day for the past fortnight, and had on occasions entered Up trains on the Down page and vice versa. He assumed at the time that he must have done so on this occasion. The new register had not been in use at the previous box at which he had relieved.

24. A further discrepancy in the registers at Glendon and Glendon North Junction boxes was that the Glendon book showed the freight train as having been accepted by Glendon North at 3.28 a.m.; there is no parallel entry in the Glendon North Junction register, and the signalman there denied having received it. Day could only suggest that this discrepancy was a part of the muddle in which he had got in entering the new register.

25. Day had been a relief signalman in the area for 17 years. He is nearly 50 years of age and is in good health. He said that he had no troubles on his mind, and that he was fully alert at the time.

26. *Signalman H. E. Worgan* was on duty in Glendon North Junction signalbox. He said that he was offered the passenger train and accepted it at 3.50 a.m. Three minutes later the signalman at Glendon called on the telephone and asked where the fitted freight was and at what time he had given the Train Out of Section signal for it. He had answered that the fitted freight had not been offered. When asked about the change-over to the new type of register Worgan said that he had found a little difficulty at first but had quickly overcome it. The new register had first been introduced about nine months previously. He confirmed that there was no undue pressure of work and that he was able to enter his register without difficulty as events took place.

27. *Telegraph Inspector T. A. Bayliffe* gave evidence that he examined and tested the signalling equipment after the accident and had found all in order except for damage caused by the derailed vehicles. The block instruments were working properly and were in order.

28. It was clear that there had been a wanton disregard of Block procedure by Milton and Day and I questioned *District Signalman's and Traffic Inspector H. Griffin* and *Assistant Inspector G. L. Lucas* on their methods of inspection and supervision, and what reasons they could adduce for such a lapse on the part of two experienced signalmen. They said that their inspections of individual boxes were not very frequent because the district was a big one, but a record was kept of each visit though not with the details of which signalman was present at the time. Mr. Griffin had last tested Signalmen Milton and Day in March 1961 and found their knowledge of Rules and Regulations to be very good. The Inspectors did not compare the Train Registers, but they did examine them during their visits to see that they were properly entered. Mr. Griffin said that signalmen generally had grumbled a little about the new registers and that during his visits they had also tended to discuss redundancy which they feared might arise out of anticipated line closures. He thought it to be on their minds. So far as training was concerned Mr. Griffin had run a mutual improvement class throughout the winter of 1960/1961 after the new Block Regulations had been introduced and had lectured signalmen on the subject. He agreed that the mistakes made on this occasion were not through ignorance of the rules but through the failure to carry out the procedure; he was unable to suggest any alteration in methods which might have prevented it.

29. I examined the train registers of Desborough and Glendon boxes and had a comparison made of these registers with those of the neighbouring boxes over a short period. There were no serious discrepancies and the Registers were neatly and fully maintained.

Conclusions

30. This collision was caused by the neglect of two experienced signalmen to work to the Block Regulations. If Signalman Milton did in fact send Train Entering Section for the freight train he failed to watch his block instrument needle for the Up line to Glendon to see it turn to the Train On Line position in response to the appropriate turn of the pegger handle by Signalman Day at Glendon. His subsequent proposal to Day to cancel the Line Clear indication on the instrument and to give a second Line Clear for the passenger train, based on the assumption that the freight train must have cleared the Section in the fifteen minutes that had elapsed, suggests that he had ceased to give significance to this instrument. Signalman Day's suggestion that he was not given Train Entering Section for the freight train and simply made the entry subsequently on an overheard telephone conversation was irresponsible conduct to say the least. His acceptance of Milton's statement that there was no freight train in section, without a close examination of his block position as shown by his instrument and his register, and by questioning both Milton and the signalman ahead, and his action in restoring the pegger handle to normal and thereby overcoming the "one train" control simply on the basis of a telephone

conversation, was equally irresponsible. The signalboxes were provided with comprehensive Block indications and controls to help the signalmen to avoid making mistakes through carelessness, but these two men set them at naught. Both signalmen omitted to carry out the Regulations regarding protection of lines after the accident happened.

31. I have no doubt that both these men knew the regulations and were thoroughly conversant with the work. I can only suggest that in this case long familiarity with the work had bred over-confidence and that each felt he knew the pattern of traffic so well that he could afford to short-cut the procedure. This experience has shown them to be wrong, and they are fortunate that the consequences of their actions were not very much graver.

32. Driver Birkin and Fireman Hulbert were alert, and I am satisfied that Driver Birkin saw the tail lamp ahead as soon as it came in view and braked his train promptly.

Remarks

33. I cannot believe that slackness in Block procedure such as was shown by the two signalmen on this occasion was an isolated case. It is a test of character of signalmen that they should continue to work with meticulous attention to the procedure laid down in the Regulations to ensure continued safety however great their knowledge of the work. Inspection of signalboxes and examination of men serves the purpose of educating signalmen and making sure that they are competent, but it cannot of itself ensure that the minute-by-minute work throughout each shift is meticulous. The psychological effect of a periodic checking of train registers is probably more effective in upholding Block procedure, though such a comparison of registers must be thorough and detailed. A recommendation for the cross-checking of registers was made very strongly by Colonel McMullen in his report on the collision at Newlay and Horsforth in November 1956 though related to another part of the procedure, and has been repeated subsequently on occasions. I asked Mr. Gardiner, the Divisional Manager, what arrangements were in force for such examinations on this line and he has advised me that the orders were that a check should be made every six months of train registers at signalboxes with those in adjacent boxes to cover a period of 24 hours. The practice had been for the then District Operating Superintendent to advise the Station Masters direct when they were to carry out such checks. He had found however that there had been a lapse in the arrangements, as the Desborough and Glendon registers had not been checked since 27th March 1962. More stringent orders have now been issued and Mr. Gardiner has arranged to be kept informed personally regarding the state of checking throughout the Division.

34. It seems undesirable that two types of train register book so fundamentally different in layout should be in use on any one length of line, and Mr. Gardiner has informed me that when this came to notice following the accident he took immediate steps to withdraw all the old type books and replace them with the new type throughout his Division, and that the Line Manager, Derby, had extended these instructions to the other divisions of the Midland line. The gradual substitution of the new register for the old register was on grounds of economy, but I understand that arrangements are being made throughout British Railways for the use of only one type of register over appropriate sections of line.

35. Rule 178 of the Railway Rule book provides that the guard of a train which has been stopped in section shall walk up the offside of the train to meet the fireman with the primary object of finding out whether the opposite line is clear or not, and then protect the train in the rear. The rule does not specifically allow any discretion about protection in rear, but I understand that the practice is for guards to use it. Rule 179 lays down the method of protection, which in general involves walking back ¾ mile and laying down detonators. The guard of the freight train was dilatory in going to meet the fireman, and so verifying without delay that the opposite line was clear, and when he met him and was told the cause of the stoppage he obviously gave priority in his mind to finding out whether the brake failure could be rectified rather than to going back to protect the train. If, however, he had been prompt in his first duty to verify that the opposite line was clear, as he should have been, and had met the fireman two or three minutes earlier, he would still have been in a quandary as to what to do thereafter. The train was on an important line and running under the Absolute Block, and the chance of a following train being wrongly admitted into the section was extremely remote. The failure was of a kind which might be rectified at any moment and the guard would have realised that if he were to go back at once to protect the train, it would be delayed for a considerable time until he returned to it. In cases like this it must be difficult to decide at what moment it is necessary to carry out the slow method of protection in rear involved by movement by foot over long distances as laid down in the Rules.

36. The need for auxiliary protection in rear of trains stopped in section when running under space interval conditions becomes less significant as signal controls become more positive, with colour light signalling and continuous track circuits or alternatively with more comprehensive interlocking of the Block with the signals, and as the automatic warning system of train control is applied more widely. Furthermore the likelihood of such protection by movement on foot being effective on the rare occasions when it might be of value becomes less as the density of traffic becomes greater. It would appear timely, therefore, for the methods of protection towards the rear to be reviewed; when this is done I hope it will be possible to make the guard's duties and responsibilities more definite.

37. So far as the proposed review is concerned it is relevant to note Colonel McMullen's recommendation for more arresting tail lamps in his report on the overtaking collision near Winsford in the London Midland Region, which happened on the 26th December 1962. The circumstances which gave rise to that accident and to this one were very different but the collision in each case should have been greatly mitigated if the rear of the train, indiscernible except for its oil tail lamp which is narrowly focussed, had been noticed earlier. More arresting tail lamps would contribute towards protection in rear.

I have the honour to be,

Sir,

Your obedient Servant,

W. P. REED,

Colonel.

The Secretary,
Ministry of Transport.

REGULATIONS

1. Mode of Signalling

"A", "B" and "C" represent three consecutive signalboxes, and the process of signalling a train is as follows:—

(*a*) Prior to the despatch of a train from "A" the Signalman there, provided he has received the Train Out of Section signal for the previous train and the block indicator is in the normal position, must call the attention of "B", and having obtained it, send the proper Is Line Clear signal. If the line is clear at "B" the Signalman there may acknowledge the signal and place the block indicator to the Line Clear position.

(*b*) The Signalman at "A" may then, if the line is clear, lower his signals for the train to leave "A".

(*c*) On the train leaving "A" the Signalman there must send the Train Entering Section signal to "B", and the Signalman at "B" must acknowledge the signal and place the block indicator to the Train On Line position.

(*d*) "B" must then, provided he has received the Train Out of Section signal for the previous train, and the block indicator is in the normal position, call the attention of "C", and having obtained it, must send the proper Is Line Clear signal to "C". On receiving permission from "C" for the train to approach, "B" may lower his signals for the train to proceed to "C", and when the train has arrived at or passed "B" or has been shunted clear of the line at "B", the Signalman there must call the attention of "A" and, having obtained it, send the Train Out of Section signal, which signal must be acknowledged, and place or maintain the block indicator at the normal position.

(*e*) Where special authority has been given in order to avoid delay to the train, the Is Line Clear signal must be sent forward as soon as the Is Line Clear signal has been acknowledged and before the Train Entering Section signal has been received from the box in rear, when this can be done in accordance with the Regulations under which the Is Line Clear signal may be sent.

(*f*) Where it is necessary that a Signalman who has acknowledged the Is Line Clear signal for a train should receive an intimation of its approach before it enters the section, the Train Approaching signal (1-2-1) must, where authorised, be sent in accordance with the special instructions issued.

* * * * * *

2(*a*). Cancelling Signal (3-5)

Should it be necessary to cancel the Is Line Clear or Train Entering Section signal, the Cancelling signal must be sent, and the Signalman receiving the signal must, after acknowledging it, place or maintain the block indicator at the normal position, except:—

(i) under the circumstances named in clause (*e*) of Regulation 12, or

(ii) when the train had been accepted under Regulation 5, and the line inside the home signal is still occupied, in which case the Blocking Back signal (2-4) must be sent.

The Cancelling signal must only be used when the Is Line Clear signal has been accepted, or the Train Entering Section signal has been acknowledged, by the Signalman in advance, and it is found that the train concerned will not proceed in the usual course.

UP LINE

	Code	*Rear Section* Accepted	T.E.S. Received	T.O.S. Sent	*Advance Section* Accepted	T.E.S. Sent	T.O.S. Received
Desborough North Box (S/man R. Tomlin)							
Train Freight 2.55 a.m. (Wigston—Brent)	5	3.7	.10	.15	3.10	.14	.17
Freight 1.0 a.m. (Lawley St.—Brent)	3.1.1.	3.22	.27	.29	.27	.29	.31
Passenger 12.5 a.m. (Manchester C— St. Pancras)	4	3.42	.44	.47	.44	.47	.49
Desborough Station Box (S/man G. Milton)							
Train Freight 2.55 a.m. (Wigston—Brent)	5	3.11	.16	.18	3.13	.17	.22
Freight 1.0 a.m. (Lawley St.—Brent)	3.1.1.	3.28	.30	.32	.28	.31	—
Passenger 12.5 a.m. (Manchester C— St. Pancras)	4	3.46	.48	.49	.46(a)	.49(b)	—
Glendon and Rushton Box (Rlf/S/man R. Day)							
Train Freight 2.55 a.m. (Wigston—Brent)	5	3.13	.17	.22	.17	.22	.24
Freight 1.0 a.m. (Lawley St.—Brent)	3.1.1.	3.28	.31	—	.28(c)	—	—
Passenger 12.5 a.m. (Manchester C— St. Pancras)	4	—(a)	—(b)	—	—(d)	—	—
			S. Foskett. Rule 55		4.8		
Glendon North Junction Box (S/man E. Worgan)							
Train Freight 2.55 a.m. (Wigston—Brent)	5	3.17	.21	.23	.17	.22	.25
Passenger 12.5 a.m. (Manchester C— St. Pancras)	4	3.50(d)	Cancelled	5.47	.50(d)	Cancelled	4.2

NOTES

Desborough Station Box. (a) and (b). Entries not recorded by Glendon and Rushton.

Glendon and Rushton Box. (a) and (b). No acceptance or Train Entering Section signals are recorded as received from Desborough Station for the 12.5 a.m. passenger train.
(c). The 1.0 a.m. freight train is shown as accepted by Glendon North at 3.28 a.m. but no entry is shown for this train in the Glendon North book.
(d). No entry appears for acceptance ahead of the 12.5 a.m. passenger train.

Glendon North Junction Box. No entry appears for the 1.0 a.m. freight train.
(d). The 12.5 a.m. passenger train is recorded as accepted from Glendon and Rushton at 3.50 a.m. and accepted forward at the same time.

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