



MINISTRY OF TRANSPORT AND
CIVIL AVIATION

RAILWAY ACCIDENTS

REPORT ON THE COLLISION which occurred on 22nd November 1956 at NEWLAY and HORSFORTH in the NORTH EASTERN REGION BRITISH RAILWAYS

LONDON: HER MAJESTY'S STATIONERY OFFICE

1957

ONE SHILLING

9th April 1957.

SIR,

I have the honour to report for the information of the Minister of Transport and Civil Aviation, in accordance with the Order dated 29th November, 1956, the result of my inquiry into the collision which occurred at about 10.23 p.m. on 22nd November, 1956, at Newlay & Horsforth on the four track section of the main line between Leeds and Carlisle in the North Eastern Region, British Railways. At the time of the accident the operation of this line was the responsibility of the Midland Division of the London Midland Region.

The 3.20 p.m. special freight train from Carlisle to Leeds was stopped at the Up Slow home signal at Newlay & Horsforth for about 13 minutes, in which position it was alongside the passenger platform. The signal was then cleared and the train had moved about 100 yards when it was struck at the rear about midway along the platform by the 4.50 p.m. freight train from Carlisle to Leeds, which was travelling at about 35 m.p.h. The signalman was unaware that the 3.20 p.m. train was in the block section and had lowered the home, starter and distant signals for the 4.50 p.m. train to run through the station on the Up Slow line. He and the signalman at Calverley & Rodley, the next box towards Carlisle, had committed serious block irregularities.

I regret to report that Goods Guard J. Slater of the 3.20 p.m. train was killed. The driver, fireman and guard of the 4.50 p.m. train suffered slight injuries or shock. The Control were informed of the accident without delay by Porter W. Ashcroft of Newlay & Horsforth station and ordered an ambulance, which arrived from Leeds in a very short time. A doctor who lives in the neighbourhood heard the noise of the collision and went quickly to the station.

The 3.20 p.m. train comprised 10 loose coupled bogie bolster wagons loaded with pipes each 40 ft. long and weighing about 16 cwt., and a 20 ton brake van. The van and the two rearmost vehicles were pushed forward for about 60 yards and demolished. The train parted between the eighth and ninth vehicles and the front portion ran on undamaged and was stopped by the driver opposite to the signal box. The 4.50 p.m. train was partially fitted and comprised 34 loaded vehicles and a brake van, and it was drawn by an engine of the 5 M.T. class, driven from the left hand side; the total weight of the train was about 700 tons. The engine was derailed and sustained considerable damage at the front end. The leading six vehicles were also derailed and were slightly damaged but the seventh to the nineteenth remained on the rails. The next eight wagons were derailed and mostly wrecked after one of them had struck the stonework of an overbridge at the west end of the platform. The remaining seven wagons and the brake van remained on the track.

The Up and Down Slow lines were blocked and the debris of the wagons was piled high under the bridge. The pipes from the last two bogie wagons of the 3.20 p.m. train were also strewn over both these tracks. The fast lines were not affected. The steam cranes from Holbeck and Hellifield were sent to the site and the wreckage was cleared and the lines repaired by 5.45 a.m. on 24th November. Stopping passenger trains, however, were unable to use the station until the damage to the platform had been repaired.

There had been fog earlier in the evening but at the time of the accident the conditions had improved and the visibility was about 300 yards.

DESCRIPTION

1. In the Up direction the four track main line from Calverley & Rodley (Calverley) to Newlay & Horsforth (Newlay) runs roughly Eastwards, and from North to South the lines are Up Slow, Down Slow, Up Fast, Down Fast. The Up lines are on an easy falling gradient and approaching Newlay they are curved first to the left and then through the station to the right, the radii of both the curves being about 35 chains. The Up Slow home signal at Newlay is at the east end of the passenger platform and, on account of the curvature and an overbridge at the west end of the platform, it has a banner repeater. The signal box is at the east end of the station 230 yards beyond the Up Slow home signal, and on the Down side of the lines.

The relevant distances from the point of the collision are:—

Calverley station	about 1½ miles	West
Newlay Up Slow distant signal	905 yards	„
Newlay Up Slow home signal banner repeater	229	„ „
Point of collision (centre of platform)	—	—
Newlay Up Slow home signal	98	„ East
Newlay signal box	328	„ „
Leeds	about 5 miles	„

2. Train working is by the rotary interlocking 3-position block instruments of the former Midland Railway. The arrangements are such that the Up Slow advanced starting signal at Calverley cannot be cleared until "Line Clear" has been obtained from Newlay, and once the instruments at Newlay and Calverley have been placed at "Line Clear" they can be moved *back* to the "Line Blocked" position only by using "Line Clear Cancel" plungers on both the instruments. When the Newlay instrument has been placed at "Train on Line" it is locked until the home signal has been lowered and until the train has passed beyond it and operated a treadle; if the treadle should fail to release the instrument, a "Train on Line Cancel" plunger at Newlay can be used after the glass cover has been broken, to restore the instruments to normal.

3. The rules regarding the use of the cancelling plungers as given in the Double Line Block Instructions of the former London Midland and Scottish Railway, are as follows:—

"*Cancelling Signal.*—(a) Should it be necessary to cancel the Is line clear signal for a train that has been signalled to and accepted by the Signalman at the box in advance, the Signalman at the box in rear must forward the Cancelling signal, press in the plunger lettered "Line clear cancel", and hold it in until the signal has been acknowledged. The Signalman at the box in advance must, on receipt of the Cancelling signal, press in the plunger lettered "Line clear cancel", and, while both plungers are pressed in, move the handle back to Line blocked, and then acknowledge the Cancelling signal.

(b) Should it be necessary to cancel the signal for a train after the block indicator has been placed to Train on line, the Signalman at the box in rear must inform the Signalman at the box in advance by means of the speaking instrument why it is necessary to do so, and then forward the Cancelling signal. The Signalman at the box in advance, on being satisfied that there is no mistake respecting the Cancelling signal being used, must break the glass covering the plunger lettered "Train on line cancel", press in the plunger, and place the indicator to the normal position (Line blocked) while the plunger is being pressed."

4. The Newlay Up Slow home signal is fitted with a diamond sign which indicates that track circuiting is provided or that "Lock and Block" signalling (such as the former Midland Railway rotary block) is in operation; there is no berth track circuit at this signal. Rule 55 stipulates that when a train is stopped at a signal equipped with such a sign the engine whistle must be sounded. The Rule is not very clear as regards sections equipped with "Lock and Block" signalling but the intention is that the fireman should go to the signal box if the train is detained at a signal with a diamond sign for "an unusually long time".

REPORT AND EVIDENCE

5. The 3.20 p.m. train ran through Calverley on the Up Slow line at 10.2 p.m. The Newlay distant was at Caution and the train stopped at the home signal at Danger at about 10.9 p.m. Passed Fireman J. W. Sewart was in charge of the engine. He said that he sounded the whistle; the signal was cleared 7-8 minutes later on which he re-started the train. It had travelled about 100 yards when he felt a severe impact at the rear and realised there had been a collision. He applied the brakes gently and stopped with the engine opposite the box. Sewart said he was about to send the fireman to the box, in accordance with Rule 55, when the home signal came "off"; at a signal with a diamond sign (such as this signal) he would take this action after about 10 minutes. He did not think that the train had stood at the signal for as long as about 13 minutes, which in fact it had done.

6. The 4.50 p.m. train was also on the Up Slow line and ran through Calverley at 10.20 p.m. The Newlay distant and the home signal banner repeater were clear and the train collided with the 3.20 p.m. train at about 10.23 p.m. On account of the right hand curve the driver could not, from the left hand side of the engine, see the rear light and side lights on the brake van of the train ahead and was unaware of its presence until the collision occurred. The fireman's view was also obstructed by the overbridge, and thereafter he was otherwise engaged.

7. The following table shows the times of the block signals for the two trains concerned and the previous train (an express freight) on the Up Slow and for a Parcels train on the Up Fast line, *as recorded in the Train Registers of Calverley and Newlay signal boxes.*

Train	Rear Section			Advance Section			Fast or Slow line
	Accepted	T.E.S. received	T.O.S. sent	Accepted	T.E.S. sent	T.O.S. received	
<i>Calverley</i> Express freight	43	51	53	51	53	56	
3.20 p.m. freight	53	10.0	10.3	10.0	10.2	7	S
Parcels	10.5	11	12	5	12	14	F
4.50 p.m. freight	12	18	20	18	20		S
<i>Newlay</i> Express freight	49	52	55	52	55	58	S
Parcels	10.5	12	13	10.5	13	15	F
4.50 p.m. freight	17	19		19	cancelled forward		S

The signalmen concerned were:—

N. D. Blenkiron—Relief Signalsman	Calverley
F. Bonsor —Temporary Signalsman (under training)	„
B. Facer —Signalsman	Newlay

8. Blenkiron is 36 years of age, and has been a signalsman for 10 years and a relief signalsman since 1953. He had worked at most stations on this former Midland Railway line including Calverley, and was well acquainted with the rotary type of block instrument. Bonsor is 42 years old. He had been a signalsman on the former London North Eastern Railway for 15 years, resigning in 1950. He was re-employed as a temporary signalsman under training about two weeks before the accident and had been working with Blenkiron for about one week. Blenkiron and Bonsor came on duty at about 9.50 p.m. on the day of the accident. Blenkiron allowed Bonsor to work the frame, the block instruments and the bells and he himself did the booking. He considered Bonsor quite capable of doing this work.

9. The first entry in the Train Register by Blenkiron was "Train out of Section" for the express freight train on the Up Slow line at 9.53 p.m. The next movement on that line was the 3.20 p.m. freight train and he saw it pass the box at 10.2 p.m. when he recorded "Train Entering Section" as having been sent to Newlay. *He said however that he was not absolutely certain whether Bonsor had sent that signal, and it is a fact that the instruments were not turned from "Line Clear" to "Train on Line".* Blenkiron went on to say that at 10.7 p.m. he looked at the clock and booked "Train out of Section" for the train, *without hearing the bell signal and without looking at the instruments, which were still at "Line Clear".*

10. At about this time there was a telephone call from Newlay. Blenkiron thought it was at about 10.15 p.m. but agreed it might have been as early as 10.5 p.m. It was taken by Bonsor who turned round and said "The Newlay signalsman wants to know what he has in block on the Up Slow line". Blenkiron said that he told Bonsor to ask the Newlay signalsman whether the last train on that line had gone and continued "He (Bonsor) must have got the answer that it had gone because the Newlay signalsman asked for a release. Bonsor said 'shall I give him a release' and I said 'yes'." Blenkiron saw at that time that the instrument was at "Line Clear" and he thought that the Newlay signalsman must have put it in that position by mistake. Bonsor then used the "Line Clear Cancel" plunger and the instrument was placed to "Line Blocked". The 4.50 p.m. train was then accepted on the Up Slow line and "Line Clear" obtained from Newlay; all the Calverley signals were cleared and the train passed at 10.20 p.m.

11. Blenkiron excused himself for his irregular booking and for not looking at the instruments before he made the booking by saying "I relaxed my concentration. The trainee was working so well and efficiently in my opinion". He admitted however that he might have entered "Train out of Section" (10.7 p.m.) immediately after he had recorded "Train Entering Section" at 10.2 p.m. He could not account for his irregular instructions to the trainee about the "Line Clear Cancel" release. He agreed that he should have spoken on the telephone to the Newlay signalsman himself instead of allowing Bonsor to have the conversation.

12. Blenkiron had been on duty the previous night from 10.0 p.m. to 6.0 a.m. He said that he had had a good rest and was not tired, and that he had nothing on his mind.

13. Bonsor generally confirmed the above statement and said that he might have forgotten to send "Train Entering Section" for the 3.20 p.m. train (Code 2-2-4) because, when it passed, he was dealing with an incorrect bell description received from Newlay for a Down train. He thought that it was about 10.10 p.m. when the Newlay signalsman enquired on the telephone if there was a train on the Up Slow. He looked at the Train Register which was just below the telephone and saw that "Train out of Section" for the last train (the 3.20 p.m. freight) had been recorded as having been received at 10.7 p.m. and he therefore told the Newlay signalsman that there was no train on that line. Bonsor had seen the instrument was at "Line Clear" and could not understand the reason for it, and he also assumed that it had been put in that position by mistake. As already mentioned he then, on Blenkiron's instructions, used the "Line Clear Cancel" plunger to enable the Newlay signalsman to put the instrument to normal. Bonsor thought that the rotary block system was easy to learn but added that there were a lot of extra bell signals. He said however that he was "fairly confident" and added later "you do have to give a lot of concentration (to the work)".

14. Signalsman Facer of Newlay is 21 years of age, and has been a signalsman for just over a year. He came on duty at 9.45 p.m. on the night of the accident. The first train he dealt with was the express freight on the Up Slow which passed at 9.55 p.m. and for which he received "Train out of Section" at 9.58 p.m.

15. Facer agreed that at about 10.0 p.m. he gave "Line Clear" for the 3.20 p.m. train. *He omitted, however, to enter this acceptance in the Train Register.* He said this may have been on account of a train on the Down Fast which passed Newlay at 10.3 p.m.; it had been wrongly described to him and he had passed on the wrong description to Calverley, and he had to put it right. At 10.5 p.m. he accepted the Parcels train on the Up Fast and at the same time he noted the Up Slow instrument was at "Line Clear". He looked at the Train Register and saw no "Line Clear" entry for that line so he telephoned to Calverley and asked what he had accepted. Bonsor took the call and replied "the Parcels train" but Facer corrected

him by saying that that train was on the Up Fast line and Bonsor agreed. Facer thought that Bonsor then said that the last train on the Up Slow line was the freight train for which "Train out of Section" had been received at 9.55 p.m.; he again referred to the Register and saw that he too had received "Train out of Section" for that train. He then said "I thought he (Bonsor) might have the Parcels confused with the Slow line (on which it usually runs) and asked him if he would release the instrument". As already recorded Bonsor pressed the "Line Clear Cancel" plunger and Facer did the same and put the instruments to "Line Blocked". Facer then accepted the 4.50 p.m. train and cleared all the signals for it to run through Newlay.

16. Facer was definite that "Train Entering Section" had not been received for the 3.20 p.m. train. He knew that he was acting irregularly in asking for a plunger release from Calverley, and said that his correct action would have been to have had the line examined. He could not say whether he looked out of the box window towards the Up Slow home signal, but if he had done so he must have seen at least the headlights of the 3.20 p.m. train. He said he did not hear any engine whistle. Facer stated that enginemen usually complied with Rule 55 when stopped at a home signal. Some went to the box straight away while others waited 4-5 minutes.

17. Facer said that he had had a good rest before coming on duty and was not tired; also that he had no worries of any kind. He had that evening received a letter from the station master telling him to go for an interview for a new appointment which pleased him, but it did not affect his work.

18. At my request the Train Registers of Newlay and Calverley boxes were scrutinised closely, one against the other and with the Registers of the boxes on both sides, for a period of a month before the accident. A number of irregularities were found. In six of these trains were either omitted altogether or fictitious entries made for trains which did not run; none of these could have been noticed by an inspection of an individual book. An irregularity, however, by Signalman Blenkiron on 3rd November at Calverley, was a case of wrong signalling and of failure to carry out the provisions of a Block Regulation, and it could have been detected by examining his book alone. In addition there were 15 cases of trains wrongly described, 36 cases in which the wrong line had been recorded (i.e. fast instead of slow or vice versa) and 67 cases of block signals not recorded. Of the latter figure, 53 were at Newlay and 48 were omissions to record "Train out of Section" by Signalman Facer. Furthermore, it was seen that on a number of occasions signalmen had not signed on and off correctly in both boxes.

19. Mr. J. Newman had been the station master at Newlay for 5½ years, having risen to the rank through the signalling grades. During the month before the accident he had visited the box on 23 occasions and a relief station master had visited it twice. He considered Facer a steady and safe signalman and thought he seemed quite contented, and he could not account for his actions on the night of the accident. Mr. Newman said that he never checked individual block signal entries in the Train Register although he would glance through it to see if there were any omissions. When he was informed of the 53 block signal omissions (48 by Facer) Mr. Newman said "I am amazed". On the matter of incorrect signing on and off he remarked "They (the signalmen) have been told many times".

20. Mr. L. Jackson had been the station master at Calverley for 3½ years and he also had been a signalman. He considered Blenkiron "perfectly all right" and added "I have never had reason to believe otherwise". He said he took a particular interest in signalmen under training and discussed the Regulations etc. with them. Mr. Jackson had been into the box on 33 occasions during the previous month, and on the day on which, and after Blenkiron had committed the irregularity mentioned above, but he had not noticed it. Nor had he noticed some cases of incorrect signing on and off although he had visited the box in each case on the following day.

21. Mr. J. Sewell had acted as District Signalman's Inspector for 7 weeks before the accident; he said that he was in charge of 61 boxes and had at that time visited most of them but not Calverley or Newlay. He had eight signalmen under training but had not seen them all. Mr. Sewell said that in his opinion the only irregularities which could have been readily noticed when checking the Train Registers were the omissions of the "Train out of Section" signals. He agreed that the recording of a train on the wrong line was a serious matter and could only suggest that the entry had not been made immediately after the "Is Line Clear?" signal had been sent. With regard to the incorrect signing on and off he said "it wants tightening up throughout".

22. Mr. L. I. Jardine had been Assistant District Signalman's Inspector since February 1956. He knew Facer and said that he was "satisfied with his performance as a signalman". There were other signalmen as young as Facer in important boxes. He stated "we see them working the boxes and there are none that I know of who require any special attention. After seeing them functioning normally we take it they are doing the job properly and give them no extra attention after we have seen them established". He had been at Newlay box three times and at Calverley box four times during the month before the accident, and he had not noticed the many omissions of bell signals from the Train Register at Newlay. When asked if he had noticed the irregular signing on and off he replied "I may have mentioned it to the men when they have been on the previous turn, otherwise I have to wait until I can see them".

23. Mr. H. Greenwood, Chief Inspector, North Eastern Region, York, had been District Signaller's Inspector, Leeds, until a few months before the accident. He said that he knew Facer and had no hesitation whatever in allowing him to work independently in Newlay box. When shown the list of irregularities he agreed that it represented an unsatisfactory state of affairs.

CONCLUSIONS AND RECOMMENDATIONS

24. This accident was the result of most irregular working by the signalmen concerned. The "Lock and Block" system on this section of the line is completely secure against simple forgetfulness but not against misuse.

25. At Calverley & Rodley "Train Entering Section" was not sent by Temporary Signaller Bonsor for the 3.20 p.m. train and "Train out of Section" was not received, yet both the signals were falsely recorded in the Train Register by Signaller Blenkiron. He then forgot the true situation and both he and Bonsor received the impression from his false entry that the train had passed out of the forward section. At Newlay & Horsforth Signaller Facer omitted to record "Line Clear" for the 3.20 p.m. train in the Register, and then forgot that he had given this acceptance. Blenkiron and Facer both saw that the block instrument was at "Line Clear" but they refused to believe this unmistakable indication, and jumped to the conclusion that the instrument was wrong. As a result the instruments were put to normal and the following train was signalled into the section.

26. I think that Blenkiron's misdeeds were more serious than Facer's. He was an experienced signaller and I cannot believe that he mistook block signals on another line for "Train Entering Section" and "Train out of Section" on the Up Slow. Presumably he recorded "Train Entering Section" as the train passed without hearing the signal sent, and I am inclined to think that he entered "Train out of Section" automatically immediately afterwards. He realised that he was at fault in not taking over the telephone during the conversation with Facer. If he had done so and discussed the Train Register entries fully with Facer the mistakes would almost certainly have been found. Facer's omission was unfortunate and it is difficult to understand how he failed to recollect that he had given "Line Clear" for a train, especially when his instrument was indicating that he had done so.

27. Blenkiron and Facer both realised that the action they took in releasing the block instruments and placing them to normal was most irregular; so far as Blenkiron is concerned it was inexcusable to teach such malpractices to the signaller under training. No cancelling signals were sent and no record of the cancellation was made in either Train Register. The "Line Clear Cancel" plungers should not have been used and the instruments should have been placed at "Train on Line". They could then have been released only by Facer using the "Train on Line Cancel" plunger after breaking a glass cover; before using the plunger he should have received the cancelling signal from Calverley and should have satisfied himself that there had been no mistake. He himself said that he should have had the line examined, but if he had only looked out of the box window he would have seen the train standing at the signal and realised that a mistake had been made.

Both Blenkiron and Facer have clear records.

28. A disturbing feature of this case is the evidence of other irregularities which, combined with the above, indicates that the supervision of the block working generally in the boxes concerned was not good. A very similar accident which occurred on 10th December 1956 at Castleton Sidings signal box, between Manchester Victoria and Rochdale, also indicated lack of supervision. Some of the irregularities in the present case could have been noticed by the checking of individual Train Registers which should undoubtedly have been more thorough. On the other hand, the more serious ones came to light only after the accident by the checking of the Registers of adjacent boxes, one against the other; these irregularities included the complete omission of trains, the entry of fictitious trains and the recording of trains on the wrong line.

29. I referred to this matter in my Report on the collision at Irk Valley Junction on 15th August 1953, the last paragraph of which read:—

"It is satisfactory to note that immediately after this accident the Railway Executive Headquarters inaugurated a campaign against irregular working in signal boxes, and I am sure that this will have good results. I do, however, consider that arrangements should be made for a closer scrutiny of Train Registers than I am informed has been possible in the past, and I recommend that this should be applied particularly at junctions and to signalmen whose experience is limited."

In a letter dated 25th February 1954 the British Transport Commission made the following comment on the above:—

"Generally, the scrutiny of the books is undertaken by Stationmasters and Inspectors and steps have already been taken to draw attention to the instructions which are in existence on this point. Where possible, special arrangements are being made to take the books out of the boxes for examination, and the importance of a proper scrutiny of the books is being stressed upon all concerned with special reference to those of adjacent boxes."

30. I am sure that the action taken by the Commission has had beneficial results. The fact remains however, that in the district concerned Train Register books had not been withdrawn for scrutiny except perhaps in connection with particular incidents. I appreciate that the cross-checking of Registers of adjacent boxes involves a considerable amount of time and trouble, and a full check of all Registers is not only completely out of the question but also quite undesirable. I am, however, of the opinion that at least a measure of cross-checking of Train Registers should be made in each district as a regular routine, and I recommend this should be done.

31. Rule 55 of the British Railways Rule book takes cognizance of the security afforded by "Lock and Block" signalling, track circuiting etc. and, on sections of the line so equipped, it requires the fireman to go to the signal box after "an unusually long" detention at a signal; this is in contrast to the maximum period of 2 minutes elsewhere, and is as much for operational reasons as for safety. The driver of the 3.20 p.m. train considered 10 minutes a reasonable time to wait in this case and I do not criticise him for this. His judgment of the time the train had actually waited was however faulty, but even if he had sent the fireman after 10 minutes the collision would still have occurred for it would have taken the fireman 2-3 minutes to reach the box and by then the following train had passed the distant signal at clear.

32. I have discussed this Rule with the officers of the British Transport Commission who inform me that consideration has been given to the question of defining more precisely the time after which action is required to be taken on lines equipped with "Lock and Block" signalling etc., but that it has been found impracticable. The time varies considerably according to the circumstances and it may in fact vary at the same signal at different times of the day. Furthermore drivers familiar with a route should know when 5 minutes is an unusually long time and when 15 minutes may not be. I therefore accept the fact that the use of the phrase an "unusually long time" is unavoidable. Rule 55 is, however, long and it contains many clauses, and the British Transport Commission intend to amend it to make it more clear.

I have the honour to be,

Sir,

Your obedient Servant,

D. McMULLEN,

Colonel.

The Secretary,

Ministry of Transport and Civil Aviation.