REPORT OF INQUIRY

INTO

ACCIDENT ON RAILWAY SYSTEM OF CORAS IOMPAIR EIREANN

NEAR

DUNDRED, CO. DUBLIN.

ON 23rd DECEMBER, 1957.

Department of Industry and Commerce,
DUBLIN.
Railway Accident on Coras Iompair Éireann System near Dundrum, Co. Dublin, on 23rd December, 1957.

1. The Minister for Industry and Commerce by order dated the 30th day of December 1957 directed that an inquiry be made by T. L. Hogan, B.Sc., B.E. M.I.C.E.I., into the causes of an accident which occurred on the Coras Iompair Éireann system near Dundrum railway station, Co. Dublin, on the 23rd December, 1957.

2. I took evidence in public at 22, Upper Merrion St., Dublin, on 15th and 16th January, 1958. The evidence was not taken on oath. I also inspected the scene of the accident.

I have the honour to report as follows:-

Appearances


   Mr. D. F. Sheridan, B.E. instructed by John J. Early & Co. Solicitors, appeared for the next-of-kin of the deceased driver, Mr. Andrew Larkin.

   Mr. J. J. O'Connor, Solicitor, appeared for Mr. Patrick Lalor, Signalman, Foxrock.

   Mr. A. P. Griffiths represented the Amalgamated Society of Locomotive Engineers & Firemen, of which the late Mr. Larkin was a member.

   Mr. Smyth watched the proceedings on behalf of the Irish Transport and General Workers Union.

   Mr. Kirwan watched the proceedings on behalf of the National Association of Transport Employers.

Persons who gave evidence

4. The following persons gave evidence at the Inquiry:-

   H. J. Guthrie, M.I.M.I., signal & Electrical Engineer, C.I.E.
   E. J. Caffrey, Draftsman, C.I.E.
   T. C. Yates, Asst. District Engineer, C.I.E.
   Thomas Walsh, Driver, C.I.E.
   Thomas Condon, Porter, acting Guard, C.I.E.
   James O'Keeffe, Passenger Guard, C.I.E.
   William O'Brien
   Seamus Doyle, Lad Porter, Stillorgan Halt.
   J. Carty, Station Foreman, Foxrock.
   J. Treston, Lad Porter, Foxrock.
   Patrick Keogh, Signalman, Shanvagh Junction.
   R. Mahony, Stationmaster, Foxrock.
   A. J. Smith, Stationmaster, Dundrum.
   Patrick Dunphy, Signalman, Dundrum.
   William Dunne, Ganger, Dundrum.
   Patrick Doyle, Station Foreman, Dundrum.
   Michael Kavanagh, Gatekeeper, Leopardstown.
Patrick Lalor, Signalman, Foxrock.
L.F. Garvey, Locomotive Foreman, Bray.
J. H. Dulley, Asst. Chief Mechanical Engineer, C.I.E.
E. F. Brennan, Fitter.

5. On 23rd December 1957 at about 5.04 p.m. the 5.20 p.m. up passenger diesel railcar train, Bray to Dublin (Harcourt St.) encountered an animal on the line in the Foxrock-Dundrum block section and was moving slowly when it was run into from behind by the 5.40 p.m. up passenger diesel railcar train from Bray to Dublin. The rear car of the 5.20 p.m. train and the front car of the 5.40 p.m. train were partly telescoped and the driver of the 5.40 p.m. train was killed. There were few passengers on the trains and none were seriously injured.

The rails were wet.

6. The line between Foxrock and Dundrum is a double line. The distance between the two stations is about three miles. The line is almost level for the first one and a half miles from Foxrock and then descends rapidly to Dundrum. The gradient at the place where the collision occurred is 1 in 91. The last mile into Dundrum is in a deep cutting crossed by several overbridges. A curve in the line ends about half a mile from Dundrum and trains approaching Dundrum are first visible when about 1,000 yards from the station.

Foxrock and Dundrum stations are block posts and the signal cabins are equipped with Harper's block instruments. The cabins are also connected by a direct telephone line.

There is a public road level crossing at Leopards-town, about half a mile from Foxrock station. The crossing is provided with gates and signals and is attended by a gateman who is accommodated in a hut containing the levers for operating the signals and a telephone connected by a direct line to Foxrock signal cabin.

Stillorgan Halt, an intermediate stopping place about three quarters of a mile from Foxrock, is not a block post and has no telephone connection with the signal cabins.

7. An employee of C.I.E. travelling as a passenger on the 5.05 p.m. down train from Harcourt Street left the train at Stillorgan Halt and informed Lad Porter Doyle that there was a cow on the line near Dundrum. Porter Doyle telephoned Station Foreman Harte at Foxrock at about 5.25 p.m. and told him about the matter. Foreman Harte sent lad Porter Tresen to inform the signalman at Foxrock who, in turn, informed the signalman at Dundrum. The signalman at Dundrum received the message at about 5.28 and left his box to instruct Danger Dunne to go out on the line and remove the animal. Danger Dunne collected and lit his lamp and proceeded along the line towards Stillorgan.

At a distance of about 1,100 yards from Dundrum he met the 5.20 p.m. up passenger train moving slowly with the cow in front of it. This was at about 5.25 p.m. The animal could not be driven off to the side because the line is in a deep cutting and Danger Dunne proceeded to drive it in front of the train in the direction of Dunrum. He proceeded in this manner for about 600 yards when, at about 5.28 p.m. the cow was killed.
8. The 5.20 p.m. train left Bray at 5.29 p.m., 9 minutes late. The delay occurred in fuelling the heating system. The train was composed of diesel rail-car No. 2628 in front, composite coach No. 2166 and diesel rail-car No. 2647.

The driver was Thomas Walsh and the guard was Thomas Condron. The train made a brief stop at Foxrock, which it left at about 5.45 p.m., 9 minutes late. Neither the driver nor guard was warned at Foxrock of the presence of the cow on the line. The train stopped briefly at Stillorgan Halt at about 5.47 p.m., and here both driver and guard were told about the cow by Porter Boyle. The driver treated the message as a caution and proceeded slowly towards Dundrum. Near the 3½ mile post he saw the cow on the line and slowed down to walking pace, driving the cow in front. He did not stop the train then or at any time before the collision. The Dundrum distant signal was at 'clear' when the train passed it. According to the driver's evidence the Dundrum home signal was at 'clear' when he first saw it but it changed to 'danger' just before the collision. The collision took place at a point about 530 yards from Dundrum station and at the time of the collision the front of the train was about 430 yards from the station. It is probable that the red tail lamp of the 5.20 train was not lighting at the time of the collision. It was also probable that the blinds between the lighted portion of the rear coach and the rear driver's compartment were drawn.

9. The 5.40 p.m. train left Bray on time at 5.40 p.m. The train was composed of diesel rail-car No. 2644 in front and diesel rail-car No. 2639. The driver was the deceased Andrew Larkin, the guard was James O'Sullivan. It was stopped and held by the signals at Shanganagh Junction for about two minutes awaiting acceptance from Foxrock. It arrived at Foxrock at about 5.56 p.m. The starting signals controlling entry to the Foxrock-Dundrum section were at 'danger' and there was a short delay. The signals were cleared and the train left Foxrock at about 5.57 p.m. Less than half a mile from Foxrock the train was stopped at the Leopardstown level crossing signal by the signal 'danger' and the gatekeeper holding a red light. After about 2 minutes delay the gatekeeper gave a green light signal and
5.40 P.M.
Train.

(continued)

the train resumed its journey. During these proceedings the level crossing gates remained closed across the road and the driver and guard of the train received no message and could not have known why the train had been stopped or why it was allowed to proceed. The train stopped briefly at Stillorgan Halt at about 6.01 p.m. and the guard handed a paper to Porter Doyle but had no conversation with him. Neither driver nor guard was told about the cow on the line. After Stillorgan the train ran at a fast pace, about 45-50 m.p.h. An initial brake application and release was made at about the 4 mile post near the commencement of the down grade into Dundrum. It appeared that a second brake application was made just before the collision but the point at which this application was made could not be established clearly. According to the guard's evidence the wheels of the train skidded on the rails and there was no noticeable slowing up of the train before the collision. According to the guard the second brake application was made at about the place where it is normal to commence braking for a stop at Dundrum. Skid marks on the track suggested that the train was fully braked immediately before the impact. The front car of the 5.40 crashed into the rear car of the 5.20 and over-rotated for a length of about ten feet, displacing the rear bogies of the 5.20 and severely damaging both cars.
Signalman Lalor received the message about the cow on the line near Dundrum at about 5.25 p.m. and passed it on to Signalman Dunphy at Dundrum. Signalman Lalor did not warn the 5.20 p.m. and 5.40 p.m. trains about the cow and did not arrange for anyone else to warn them. When the 5.20 train arrived at Foxrock at about 5.44 p.m. all the signals were off as acceptance of the train had already been obtained from Dundrum. After the departure of the 5.20 p.m. train the signals were replaced to 'danger'. Signalman Lalor accepted the 5.40 p.m. train from Shankeragh at 5.45 p.m. and when the train arrived at Foxrock at about 5.56 p.m. the starting signals were at 'danger'. Then the train was a short time in the station he pulled off the starting signals allowing it to proceed at about 5.57. At this time he had not obtained acceptance of the 5.40 p.m. train from Dundrum. The red arm of his block indicator which would have been at "clear" if Dundrum had accepted the train was in fact at "danger" when he pulled off the starting signals for the 5.40. He noticed this when the train had just started and, according to his evidence which from this point differs from the evidence of the Dundrum Signalman, immediately telephoned to Dundrum and was told by the Signalman there that he had not accepted the 5.40 and that the 5.20 had not yet arrived at Dundrum. He then immediately telephoned the gatekeeper at Leopardstown level crossing, said that a mistake had been made and told him to stop and hold the 5.40 train, if possible, by throwing the gate signal against it and going out on the line with a light. The gatekeeper acted at once and succeeded in stopping the train. Signalman Lalor then, according to his account, waited for about two minutes and, at about 5.59 p.m. again telephoned Dundrum. According to Lalor's evidence the Dundrum signalman said that he saw the lights of the 5.20 coming and told him (Lalor) to let on the 5.40 train. As a result of this conversation Signalman Lalor telephoned the gatekeeper at Leopardstown to signal the 5.40 train to proceed.

A few minutes later, according to Lalor, Dunphy telephoned him and told him that the 5.20 had stopped near the Dyanrma home signal. Lalor told Dunphy to get out as quick as he could with a lamp to try to stop the 5.40.
Signalman Dunphy received the message about the cow from Foxrock about 5.25 p.m. He left the signal cabin to tell Ganger Dunn to remove the cow and was away for about 5 minutes. Before leaving the cabin he stated that he turned his block indicator disc to white to give a 'clear road' to Foxrock for the 5.20 and informed Foxrock of the position; he stated that he also obtained acceptance of the 5.20 from Harcourt Street and cleared all his signals, up distant, up home and up starter. At 5.40 p.m. he accepted the 5.45 down train from Harcourt Street.

At 5.45 p.m. he sent the "is line clear" signal to Foxrock for the 5.45 down and it was accepted immediately. At 5.46 p.m. he received a telephone message from the Foxrock signalman asking him to look at the tail light on the 5.20 as he thought it wanted attention. At 5.55 p.m. when the 5.45 down train was leaving Dundrum he sent the "train entering section" signal to Foxrock. From this point the account given by Signalman Dunphy differs from that of Signalman Lalor. Dunphy stated that when he saw the lights of the 5.20 coming slowly around the bend he telephoned Lalor to tell him that there would be delay. This was a few minutes after the departure of the 5.45 train—say 5.57 p.m. According to Dunphy's evidence, Dunphy told Lalor that he saw the lights of the 5.20 coming round the bend. Lalor said that he had made a mistake, that he had mistaken the bulls and had let the 5.40 go. Dunphy then said: "You can't have let him on to me!" Lalor then went off the phone but after a few seconds the conversation was resumed. In the second conversation, according to Dunphy, Dunphy told Lalor that he thought the 5.20 was nearly stopped. Lalor said that he thought the 5.40 was past the (Leopardstown) gates and Dunphy then said that he would run (to try to stop the 5.40).

Signalman Dunphy then, in the presence of Foreman Doyle who had just come to the cabin, replaced the up distant signal to "caution" and moved the up home signal to "danger" to check, as he said, if the lamp was lighting. Finding that it was, he replaced the home signal to "clear". Dunphy then took up some detonators and ran from the signal cabin with the intention of warning the 5.40 train if possible. He had got as far as the middle of the 5.20 train when the collision occurred.
12. The evidence of Signalman Lalor and Dunphy regarding the telephone conversations which took place between them before the accident differs materially.

According to Signalman Lalor’s evidence he had three separate telephone conversations with Signalman Dunphy after the departure of the 5.40 from Foxrock. The first conversation took place about 5.57 p.m. when the 5.40 was just pulling out of the station. It was made by Lalor to ask Dunphy if he had accepted the 5.40, and the answer was “yes.” The second conversation took place two to three minutes later (5.59/6.00 p.m.), the 5.40 train having in the meantime been stopped by Lalor at Leopardstown. The second conversation was also initiated by Lalor and in it Dunphy told Lalor that he could see the lights of the 5.20 coming. Lalor said that he had the 5.40 blocked at Leopardstown and Dunphy said “let him on.” As a result of this conversation Lalor telephoned the gatekeeper at Leopardstown to signal the 5.40 train to proceed. The third conversation was initiated by Dunphy to tell Lalor that the 5.20 had stopped near the Dundrum home signal.

According to Signalman Dunphy two conversations took place divided by an interval of a few seconds. The first conversation was initiated by Dunphy who had just seen the lights of the 5.20 appearing round the bend. Dunphy told Lalor that he saw the lights of the 5.20 coming. Lalor said that he had made a mistake and let the 5.40 on and Dunphy said “You can’t have let him on to me.” A few seconds later the second conversation took place. Dunphy told Lalor that he thought the 5.20 was nearly stopped. Lalor said that he thought the 5.40 was past the gates and Dunphy said that he would run to try to stop the 5.40.

Lalor’s first conversation has no counterpart in Dunphy’s account.

Lalor’s second conversation and Dunphy’s first correspond in certain respects. In both accounts Dunphy reported seeing the lights of the 5.20 train coming. In both accounts Dunphy is said to have used the words “let him on”; according to Dunphy these words were included in an exclamation “You can’t have let him on to me” but according to Lalor they were a direction to him to let the train through Leopardstown. Dunphy’s account contains no reference to the 5.40 being blocked at Leopardstown.

Lalor’s third conversation and Dunphy’s second correspond essentially. According to both accounts Dunphy said that the 5.20 was stopped or nearly stopped and both versions refer to running out to stop the 5.40.

Signalman Dunphy appears to have been in a very excited state of mind at the time of the accident. His evidence was very incoherent and I do not accept his account of the telephone conversations as reasonably complete and accurate. I accept Signalman Lalor’s evidence and I believe that the sequence of events was generally as described by him.

13. There was conflict of evidence as to whether the tail lamp of the 5.20 train was lighting at the time of the collision. Signalman O’Brien said that the lamp was lighting when the train passed Shangnagh. Signalman Lalor stated that he noticed that the lamp was not lighting when the train was leaving Foxrock. Foreman Harte stated that the lamp was lighting when the train was in Foxrock station. Mr. Kavanagh, gatekeeper, Leopardstown level crossing, stated that the lamp was lighting when the train passed him. Mr. O’Brien, guard of the 5.49 p.m. down train which passed the 5.20 glowed a few minutes before the collision, said that he was looking at the lamps and he noticed that it had no red tail lamp. I think it probable that the lamp on all lamps was lighting at Foxrock and went out as the train left Foxrock, and that it was not lighting at the time of the collision.
14. The brakes of the two cars which formed the 5.40 train were examined, in the course of a routine examination of the cars, on the morning of the day on which the accident occurred. Evidence was given that the brakes were then in good order and there is no reason to think that they were defective at the time of the accident.

15. Evidence was given that the installation was inspected by officials of C.I.E. soon after the accident and found to be in order. No suggestion was made nor is there any reason to think that the installation was defective in any way.

16. The deceased driver of the 5.40 train, Andrew Larkin, properly left Foxrock Station and entered the Foxrock-Dunlrum section when the starting signal was lowered. He was not cautioned about the presence of the cow on the line. He was alert and stopped his train at Leopardstown crossing when the signal there was thrown against him. He was not told why he was stopped at Leopardstown and he started from there when signalled to do so by the gateman. The train appears to have been running fast, about 45 m.p.h., but not at an excessive speed. The night was dark and if, as appears probable, the tail lamp of the 5.20 train was not lighting it is unlikely that he could have seen that train soon enough to enable him to avoid the collision. Evidence was given of a test carried out by officers of C.I.E. at the scene of the accident and under similar conditions. It was found that a stationary train could be seen from a train approaching from the rear from a distance of only 100 yards when the stationary train carried no rear light but that it could be seen from nearly 500 yards when provided with a rear light.

Mr. Larkin was aged about 56 years and was passed as driver in 1948. He had been driving diesels for about 4 years. He had passed a test for eyesight in April, 1955. I do not think that he was in any way to blame for the accident.

17. I consider that the accident was caused by the action of Signalman Lalor, Foxrock, in permitting the 5.40 train to leave Foxrock and subsequently to leave Leopardstown crossing at times when he had not obtained acceptance of the train from Dunlrum in accordance with the Rules and Regulations of Córas Iompair Éireann.

Although there was conflict of evidence on the point, I am of the opinion that Signalman Dunphy, Dunlrum, thinking that the 5.20 would soon clear the section, suggested to Signalman Lalor that he should allow the 5.40 train to proceed from Leopardstown and that this action of Signalman Dunphy's contributed to cause the accident.
Signalman Lalor gave his evidence very frankly and admitted his mistake in letting the 5.40 leave Foxrock. He could give no reason for his error except that he must have mistaken the bell signals. He said that at about 5.55 p.m. he heard a signal of two beats followed by a signal of 'one, pause, three' beats. The two beats signal was no doubt the 'train entering section' signal from Dundrum in respect of the 5.45 down train. The 'one, pause three' signal could have been the acceptance from Shanganagh of the 5.45 but there is a discrepancy between the times recorded for this signal in the Foxrock and Shanganagh books, the Foxrock book putting it at 5.55 and the Shanganagh book at 5.47. There was no evidence or record of a 'one, pause, three' signal from Dundrum to Foxrock at the time. In any case the bell signals are only to be used in conjunction with the block instrument and, if so used, no such mistake should occur.

Signalman Lalor acted with commendable presence of mind and promptitude in having the train stopped at Leopardstown crossing and it is to be regretted that he lost the opportunity of retrieving his earlier mistake by allowing the train to proceed again in circumstances which were irregular no matter what information he may have received by telephone from Dundrum.

18. The presence of the animal on the line did not in itself constitute a significant danger to trains and was not the cause of the accident. Trains may be delayed in a section for many reasons but if the block and signalling arrangements are properly operated no danger should arise. The collision might have been avoided, however, if the driver had been warned of the obstruction and instructed to proceed cautiously. The railway company's Regulations for Train Signalling provide that trains shall be stopped before entering sections known to be obstructed by animals on the line and that the drivers shall be informed of the circumstances and instructed to proceed cautiously. The driver of the 5.20 train was cautioned at Stillorgan by the porter there who had no special duty to caution him but neither he nor the driver of the 5.40 was cautioned at Foxrock as required by the regulations. I consider that it was the duty of Signalman Lalor to give the caution or see that it was given and I consider that he was at fault in not doing so.

(T.L. Hogan)

12th March, 1958.