REPORT OF INQUIRY

INTO

THE RAILWAY ACCIDENT

ΑT

DALKEY, CO. DUBLIN

ON

16TH NOVEMBER, 1979

REPORT OF INQUIRY INTO THE RAILWAY ACCIDENT AT DALKEY, CO. DUBLIN, ON 16 NOVEMBER, 1979

INTRODUCTION

The Minister for Tourism and Transport directed, by Order, that J.V. Feehan, BE, MIEI, hold an inquiry pursuant to Section 7 of the Regulation of Railways Act, 1871, as adapted, into the cause of the accident which occurred on the Coras Iompair Eireann railway system near Dalkey Station, Co. Dublin, on Friday the 16th day of November, 1979, and in which thirty-four passengers and two railway employees received injuries of varying severity. Fortunately there were no fatalities.

I inspected the accident site on the morning of the accident. I heard evidence from persons concerned or having knowledge of the accident and from officers of Coras Iompair Eireann on 15th April, 1980, at the Land Commission Court Room, 24 Upper Merrion Street, Dublin 2. The evidence was not taken on oath and was heard in public. Legal and trade union representation is listed at Annex 1. The witnesses listed at Annex II gave evidence.

I have the honour to report as follows:-

DESCRIPTION AND CIRCUMSTANCES

Dalkey Station is 8 miles from Pearse Station, Dublin on the railway to Rosslare Harbour. There is a double track for the 13½ miles from Dublin to Bray, Co. Wicklow. Between 8½ and 9½ miles from Dublin the maximum permitted speed is 30 m.p.h.

Stations nearest to Dalkey in the Up (towards Dublin) and Down (towards Bray) directions are, respectively, Glenageary (7½ miles from Pearse

Station) and Killiney (10 miles from Pearse Station). At the time of the

accident the active signal cabins on either side of Dalkey were Dun Laoghaire, the second station past Glenageary, in the Up direction and Killiney in the Down direction. Signals on the line were mainly semaphore type.

Most of the railway between Dalkey and Killiney is curved and part of one curve runs through a tunnel which is about 160 yards long. The Dalkey Up Distant and Up Outer Home signals were respectively located outside the Killiney and Dalkey ends of the tunnel.

Two locomotive-hauled Up commuter passenger trains were involved in the accident, the 08.17 Bray to Howth (via Connolly Station) and the 08.27 Bray to Dublin (Connolly Station). The 08.17 train was stopped outside the Dalkey end of the tunnel and outside the Up Outer Home signal when it was struck in rear by the 08.27 train. Two carriages of the 08.17 train and the locomotive of the 08.27 train were extensively damaged. A third carriage of the 08.17 train sustained some damage.

SUMMARY OF EVIDENCE

Solicitor Maurice Kenny read a brief statement outlining the circumstances of the accident and on behalf of CIE, expressing sympathy to those injured and thanking people and organisations who helped at the accident scene. Suburban Rail Manager John Fennelly said that at the time of the accident it was bright and there was heavy frost. The 08.17 train consisted of a locomotive, steam heating van and five passenger carriages. The 08.27 train consisted of a locomotive, brake van, three passenger carriages and a steam heating van. Mr. Fennelly gave additional evidence later in the inquiry.

Senior Depotman John Cotter was alone in the Dalkey signal cabin at the time of the accident. He had been on duty since 07.08. Mr. Cotter normally worked at Shankill Station where he issued passenger tickets. He

frequently carried out relief signalman duties. He had checked the signals and points when he came on duty. The signals had operated correctly for six Up trains prior to the arrival of the 08.17 ex Bray train.

The 08.26 ex Dalkey Up train departed at 08.27. At the same time Mr. Cotter had accepted both the 08.17 ex Bray Up train from Killiney and the 08.07 ex Dublin Down express from Dun Laoghaire. After the 08.26 train departed the signalman restored the Up Starting Signal to Danger. He cleared "the road" for the 08.07 train to proceed through Dalkey and when he went to clear signals for the 08.17 train he found the lever controlling the Up Outer Home signal slack. As the pull wire was also slack he assumed the wire was broken and he reported this, by telephone. first to the foreman at — Dalkey Station and then to Rail Control at Connolly Station, Dublin and he asked that a technician be sent to examine the signal controls. The 08.07 ex Dublin express passed through Dalkey at 08.30. Dalkey gave a "Train Out of Section" bell signal to Dun Laoghaire and accepted the 06.32 ex Dundalk Down train.

Depotman Cotter was satisfied that the Up Distant signal was displaying a Caution aspect. As he could not clear the Up Outer Home signal he sent a hand-signalman to the signal to instruct the driver of the 08.17 ex Bray train to proceed past that signal while it displayed a Danger aspect.

When the hand-signalman had set out for the stationary train Mr. Cotter received a "Train Running Away" bell signal from Killiney. He telephoned Killiney signal cabin and was told the 08.27 ex Bray train had passed the Killiney Up Starting signal which was at Danger. Mr. Cotter shouted this information to the hand-signalman who continued towards the 08.17 ex Bray train.

Acting Senior Depotman Laurence Cotter told the inquiry that while his normal duties at Dalkey Station related to the booking office and the general running of the Station he had, on occasions worked as a signalman. On the morning of the accident he was in the booking office After the 08.26 ex Dalkey Up train had departed, the Dalkey signalman telephoned saying he could see from the track circuit display that the 08.17 ex Bray Up train was stopped outside the Up Outer Home signal and as the pull wire to that signal was apparently broken he asked that a hand-signalman be sent to instruct the driver to pass the signal while it displayed a Danger aspect. Depotman Cotter told John Byrne, a station porter, to report to the signal cabin for hand-signalling duties at the Up Outer Home signal. Shortly afterwards the signalman telephoned again saying he had received a "Train Running Away" signal from Killiney. This was followed by a telephone call saying there had been a collision.

Mr. Cotter was unaware of any previous instances of pull wires breaking or of other signal defects at Dalkey.

Depotman John Byrne works alternate weeks at Dalkey and Bray. On the morning of the accident he arrived at Dalkey at 06.50 and took up duty checking passenger tickets at the entrance barrier. Mr. Byrne remembered both the departure of the 08.26 Up train and the Down express running through the station. The 08.17 ex Bray Up train was due at 08.32 and intending passengers were inquiring the reason for its late arrival.

cpotman Byrne heard a public address announcement asking him to report the signal cabin. When he reached the cabin the signalman told him to the Up Outer Home signal was stuck at Danger, that it could not be taken the pull wire was broken and that a train was stopped at

the signal. He was given a green flag and a high visibility jacket and told to go to the Outer Home signal and handsignal the train past it.

As Mr.Byrne was proceeding towards the signal he met the guard of the 08.17 ex Bray train who shouted there had been an accident and that something had hit his train.

Train Driver Frank Maguire said his train, the 08.17 ex Bray, departed on time and made stops at Shankill and Killiney. As he reached Killiney all signals were clear including the Up Starting signal. Mr. Maguire did not notice if the Killiney signal box was manned at that time.

After Killiney the next signal he met was the Up Distant for Dalkey which displayed a Caution aspect. Driver Maguire halted his train at the Dalkey Outer Home signal which was at Danger.

After about five minutes the train guard, Denis O'Brien, joined him. Guard O'Brien told Driver Maguire he would walk into Dalkey Station to inquire why the signal was continuing to display a Danger aspect.

Mr. Maguire then thought he saw a "flag-man" coming to handsignal the train into the station. At about the same time his train was Struck.

While not a regular driver on the Bray to Dublin line, Mr. Maguire had driven over the route many times and had a good knowledge of that section of the railway. He had never noticed anything unusual about signals between Bray and Dublin, either in daylight or during hours of darkness.

Frain Guard Denis O'Brien had taken up duty at 07.05 on the morning of the accident. His train, with Frank Maguire driving, left $^{\mathrm{Onnolly}}$ Station, Dublin at 07.05 and proceeded to Bray where with $^{\mathrm{he}}$ same crew it was turned around to form the 08.17 ex Bray Up train.

Guard O'Brien travelled in the rear of the train and noticed nothing out of the ordinary on the journey from Bray. He could not remember noticing if the Killiney signal cabin was manned. His train's locomotive had stopped at the Up Starting signal which was just at the end of the Killiney Up platform. When station work was completed Guard O'Brien signalled to the driver with a green flag indicating he was ready-to-depart. Guard O'Brien said he would not have given a ready-to-depart signal to the driver unless he was satisfied that the Up Starting signal was displaying a Proceed aspect.

Having departed from Killiney the train was "blocked" at the Dalkey Up Outer Home signal and Mr. O'Brien after waiting aboard the train for about five minutes decided to go forward and consult with Driver Maguire. Having completed the consultation and as he was about to commence walking into Dalkey to find out why the signal was still at Danger, his train was struck in rear and pushed forward.

Mr. O'Brien had never been issued with a copy of the Train Signalling Regulations.

Senior Depotman Richard Temple had been full-time on signalling duties for the past five years. On the morning of the accident he reported for duty at Killiney at 07.36. The signal cabin had been non-operational overnight as was normal practice. Generally it was in operational service from 07.35 daily Monday to Friday.

Mr. Temple told the inquiry some of the initial actions taken when the cabin was switched-in, including advising adjacent signal cabins that Killiney was operational and testing the signals when it was safe to do so.

 $^{
m hepotman}$ Temple had accepted the 08.17 ex Bray Up train from Bray. It $^{
m arrived}$ at 08.26. The Up train ahead of the 08.17 was the 07.40 ex $^{
m wicklow}$ which did not stop at Killiney. At 08.22 Mr. Temple received a

"Train Out of Section" bell signal for that train from Dalkey. The 08.17 train departed from Killiney at 08.27.

The next Up train due at Killiney was the 08.27 ex Bray. Mr. Temple had accepted this train from Bray at 08.26. The train entered the Bray to Killiney section at 08.27 and arrived at Killiney at 08.36 (due at 08.35) at which time Mr. Temple gave a "Train Out of Section" bell signal to Bray. As the train approached Killiney the Up Outer Home and Home Signals were displaying Proceed aspects, the Starting signal was at Danger. At that stage Mr. Temple tried to ascertain the whereabouts of the 08.17 ex Bray by calling Dalkey on the block instrument. His call was not acknowledged.

When all intending passengers had gone aboard, the 08.27 train moved-off while the Starting signal was still at Danger. Mr. Temple ran from his signal cabin to attract the attention of passengers or anyone to stop the train. He also attempted, without success, to operate the train's vacuum braking system. He then drew the attention of other station staff to the Starting signal which was still at Danger and he sent a "Train Running Away" bell signal to Dalkey; this was acknowledged. At no time while the 08.27 train was at Killiney had he seen that train's guard.

Mr. Temple then telephoned Dalkey and was told that the $08.17~{
m ex}$ Bray Up train was standing at the Outer Home signal. He warned the Dalkey signalman that if it was not moved there would be a collision. Shortly afterwards he was told the collision had occured.

At Killiney the Up Starting signal is just past the Dalkey end of the Up platform, while the signal cabin is beyond the Bray end.

Consequently Mr. Temple could not be certain if the locomotive of the 08.27 ex Bray Up train had stopped at, or beyond, the Starting signal.

He did, however, say that when trains were stopped at

Killiney, locomotives occasionally were on the Dalkey side of the Starting signal. He had reported this to the station master at Bray. Killiney platform can accommodate a train of up to six carriages. It was seldom that long trains stopped there.

When questioned about recent alterations to signals at Killiney, Mr. Temple recollected that during 1979 a worked Up Distant signal was relocated slightly further from Killiney and was designated as a fixed Distant signal. A new Up Outer Home signal was installed about the same time. His understanding was that these alterations would facilitate the running of additional trains at peak periods.

Senior Depotman William O'Brien is employed at Killiney as station foreman. On the morning of the accident he was on duty in the booking office. He noticed nothing unusual about the arrival and departure of the 08.17 ex Bray Up train. When he had completed booking passengers for the next Up train, the 08.27 ex Bray, Mr. O'Brien went to the platform and when he saw all intending passengers had joined the train, he gave a hand-signal to the train's guard to indicate that Station duties were completed. The guard was in the vehicle immediately behind the locomotive. Mr. O'Brien thought the locomotive was standing about at the Starting signal.

After he had signalled to the guard and the guard in turn had signalled the driver, Depotman O'Brien noticed the Up Starting signal at Danger.

If he had looked at that signal earlier and had noticed it at Danger

would not have given any hand signal to the guard.

 $^{
m ext}$ he saw the train pulling away from the platform. As the guard was $^{
m the}$ front he could not call his attention. He then went to attend $^{
m tintending}$ passengers. At that time the signalman was still in his $^{
m bin}$.

When the Killiney signal cabin is switched-out, all the station signals are set in the Clear position. Mr. O'Brien saw nothing unusual in having signals fixed in the Clear position for some hours daily and having them worked at other times. He had never previously seen a train going past a signal at Danger. On a few occasions drivers of very long trains stopping at Killiney had brought their locomotives just past the Starting signal in order to accommodate all the carriages along the platform.

Boy Porter Damien Frawley said he was on duty at Killiney on the morning of the accident. He saw the 08.17 ex Bray Up train arrive and when station duties were completed he saw the station foreman waving to the guard.

When the 08.27 ex Bray Up train arrived, Mr. Frawley was on the Up platform. At no time did he look at signals nor did he see where the locomotive stopped relative to the Starting signal. After passengers boarded the train he closed some carriage doors. When station duties were completed he saw the foreman waving to the guard and the train pulled away. He did not see the signalman leave his cabin.

Mr. Patrick O'Toole of the Permanent Way Department stated his duties included carrying out foot patrols on the section of railway between Bray and Killiney. These patrols are undertaken three times each week. On the morning of the accident he had travelled from Bray to Killiney in the rear carriage of the 08.27 ex Bray train and was intending to walk back to Bray along the railway.

On the platform he met the signalman running towards him saying the train had started past a signal at Danger and that he had tried

O Catch up with the rear of the train to activate its brake. Mr. Temple

had failed to catch the train.

<u>Driver Thomas Doyle</u> who was injured in the accident told the inquiry he had been working on the Dublin suburban trains since about 1955. He had an intimate knowledge of that part of the railway system.

Mr. Doyle explained that his mind was blank regarding events at the time of the accident and during the weeks before and after the accident. He saw no indication that this two-week period was reducing. He could not understand what might have caused the accident.

Mr. Doyle had no recollection of seeing signal faults on the suburban railway other than lamps not being lighted. He reported these lamp outages to signalmen. He had never heard any report that the arm of the Dalkey Up Outer Home signal was not fully horizontal when the signal was at Danger.

Mr. Doyle confirmed he has copies of all the documents, books, etc., a driver is required by the Rules to have with him when on duty.

Guard James Woods had risen at about 04.00 on the morning of the accident and had acted as guard on 05.45 Dundalk/Dublin/Bray train which reached its destination at 08.09. Before leaving Dundalk he had carried out the pre-departure checks listed in the Rules. This train was turned around at Bray and designated the 08.27 ex Bray Up train. The train departed on time and arrived at Killiney at 08.36, one minute late. The slightly late running was due to waiting for late-arriving passengers at Shankill.

Because of the cold weather, Mr. Woods did not look out for signals his train approached Killiney. He appreciated the Rules specify the ended as the person in charge of a train. He did not consider a suard's duties as including watching for signals as trains approached to departed from stations. Mr. Woods travelled from Bray in the standard take van immediately behind the locomotive because the van at the rear

of the train was uncomfortable due to a combination of water spillage from the heater unit and a slight oil leak.

When his train reached Killiney Guard Woods watched passengers boarding. When they were aboard he saw that all doors were closed. The station foreman gave a hand-signal and Mr. Woods then gave a flagsignal to his driver. His recollection is that the locomotive was stopped abreast of the Up Starting signal, he had not looked at the signal arm. As the train moved-off, he looked back to check all carriage doors were closed. At that stage he saw nothing unusual at Killiney. He did not notice if the train's speed was in compliance with the published permanent speed restriction between Killiney and Dalkey. He had never seen the notice board at the commencement of the speed restriction nor was he aware of the maximum permitted speed.

As the train neared Dalkey Mr. Woods felt the impact of a collision and he was thrown to the van floor, injuring his back. He did not know if the brakes were applied before the collision. He had been aware of a braking action when the train was stopping at Killiney.

Mr. Fennelly, in his additional evidence, said John Cotter had obtained a signalling certificate in March 1978. He had annual examinations in the Rules and Signalling Regulations in 1978 and 1979 and his work in the Dalkey signal cabin had been observed by inspectors on six occasions during 1979 and found satisfactory.

Laurence Cotter had obtained a guard's certificate in 1974 and a Signalling certificate in 1977. He had been employed full-time at Dalkey for the past year.

onn Byrne obtained a guard's certificate in 1946.

Frank Maguire was appointed driver in 1963 had attended a training course in 1977 and had last undergone an examination in Rules and Signalling Regulations in 1978. His eyesight was tested in 1979.

Denis O'Brien obtained a guard's certificate in 1962 and a signalling certificate in 1974. He last attended a refresher course in Rules and Signalling Regulations in 1975 and was last examined in Rules and Regulations in 1979.

Richard Temple obtained a guard's certificate in 1969 and a signalling certificate in 1974. His most recent examination in Rules and Signalling Regulations was in 1979. His signalling work had been observed by inspectors on six occasions during 1979 and found satisfactory.

William O'Brien obtained a guard's certificate in 1949 and a signalling certificate in 1950. He was last examined in Rules and Signalling Regulations in 1979.

Thomas Doyle was appointed driver in 1963. Company medical and eyesight examinations were overdue. He was last examined in Rules and Signalling Regulations in 1978.

James Woods obtained his guard's certificate in 1966. He was appointed guard in 1974 and he was last examined in Rules and Signalling Regulations in 1979.

Mr. Fennelly confirmed that a revised edition of the Regulations for Train Signalling was being prepared and would be issued to all train guards. Mr. Fennelly also confirmed that examinations in Rules and Signalling Regulations would take account of amendments promulgated in Neekly Circulars since the Rules and Regulations booklets were last Published.

Engineer Cecil Scully explained that the Killiney signals were last altered in May, 1978. These alterations involved installing a new Up Outer Home and relocating the Up Distant further from the station. The reason for the alterations was to increase line capacity. The opening of Shankill Station in 1977 had exacerbated a capacity problem on that section of railway. While the Up Distant was in a fixed position it was intended to convert it into a worked signal similar to the Up Distant at Dalkey.

Mr. Scully was satisfied that on the morning of the accident the Dalkey signalman had acted in full compliance with Rules and Signalling Regulations. His purpose in telephoning Connolly Station was to advise that the Up Outer Home signal was unserviceable and to ask that someone be sent to repair it. There was no need to alert the Killiney signalman because the Rules and Signalling Regulations prohibit an Up train departing from Killiney before it has been accepted by Dalkey.

Certain signal cabins, including both Dalkey and Killiney, were switchedout or worked depending on the train headways needed to cater for the
scheduled traffic. When signal cabins are switched-out their
associated signals display Proceed aspects. Mr. Scully was not aware
that drivers or others had reservations about this arrangement.

On the morning of the accident Mr. Scully examined the signals controlled from the Dalkey signal cabin. The pull wire to the Up Outer Home signal was broken about sixty yards from the signal. He thought the break was due to fair wear and tear. The Up Distant Signal could not be operated from the signal cabin because debris from the accident was lying on its pull wire. Otherwise all the signals at Dalkey were operational. There was no pattern of faults with the Dalkey signals.

It was not aware of any report suggesting the arm of the Up Outer Home ignal was not fully horizontal when the signal was at Danger.

Mr. Scully had not heard that the Killiney Up Starting signal was to be moved outwards nor did he see any reason why it should be moved. Consideration was, however, being given to moving the Dalkey Up Outer Home signal to outside the Killiney end of the tunnel. The reason for this would be to ensure that no part of a long train stopped at that signal would be in the tunnel. Moving the Outer Home would involve a consequental relocation of the Up Distant signal.

Assistant General Manager Matthew Deveraux told the inquiry that while the signalling system on the suburban railway was safe it did impose operating restraints with the increased number of trains and with longer trains. Present planning envisaged that the existing system would be replaced within the next few years.

In the interim CIE would carry out all work necessary to ensure that the present system operated safely.

Engineer Joseph McFadden confirmed that the 30 mph speed restriction between Killiney and Dalkey arose because of the sharp curve on that section of the railway.

Technical Manager Sean Heneghan said the speed recorder from the locomotive of the 08.27 ex Bray Up train was recovered after the accident. While the recorder's disc was broken in the collision it was possible to piece the disc parts together. Examination of the repaired also indicated the train's speed at the Dalkey Up Distant signal was about 37 mph, the speed entering the tunnel was about 36 mph and the appear at the time of the collision was about 35 mph.

The speed recorder from the locomotive of the 08.17 train was also covered. This indicated that the locomotive was driven forward about yards as a result of the collision. Based on the length of this train its location after the collision Mr. Heneghan was satisfied

that the point of collision was inside the tunnel, about $8\frac{1}{2}$ yards from the Dalkey end.

Mr. Heneghan could not say if a brake application had been made on the 08.27 train just before the collision.

After the accident Mr. Heneghan checked the brakes on the carriages of the 08.27 train and found them satisfactory. While that train's locomotive was too badly damaged to establish that its brake was in working order Mr. Heneghan found nothing to suggest that its brake and vigilance system were not fully operational.

Mr. Heneghan explained that locomotive speedometers are calibrated to read accurately at the mid-wheel size of locomotive wheels. After the collision the wheels of the locomotive of the 08.27 train were found to be slightly less than mid-wheel size. One effect of this would be that both speedometer and recorder speeds would show slightly higher than actual speeds.

Mrs. Maureen Gleeson said her two sons had been injured in the accident. Her understanding of evidence given to the inquiry was that the 08.27 ex Bray Up train had gone past the Killiney signal when it was at Danger and that it had then been driven at least 5 mph faster than the maximum permitted speed. She was anxious to ensure that these points had been appreciated by inquiry.

Mrs. Veronica Ryan, whose son was severely injured in the accident, wondered why the signalman at Dalkey had not telephoned Killiney to alert the signalman there to the fact that the Dalkey Up Outer Home signal was non-operational. While Mrs. Ryan accepted that the signalman had complied with the relevant Rules and Signalling Regulations, she considered in the special circumstances with peak commuter traffic operating over the railway, that Killiney should have been alerted.

Mr. Anthony Gray who described himself as a member of the public expressed the view that it was no more dangerous having the 08.17 ex Bray Up train blocked at the Dalkey Up Outer Home signal because of the broken pull-wire than because of a stationary train in Dalkey Station. He went on to say there would have been no accident if the relevant Rules and Signalling Regulations had been observed.

CONCLUSION

The cause of the accident at Dalkey on the morning of 16th November, 1979 was that the 08.27 ex Bray Up train was running at such speed that its driver, when he became aware of an obstruction on the line ahead, could not stop his train before it was in collision with the rear of the 08.17 Up train which was stationary outside the Dalkey Up Outer Home signal.

OBSERVATIONS AND RECOMMENDATIONS

It is probable that the O8.27 ex Bray Up train departed from Killiney while the Up Starting signal was still displaying a Danger aspect and that subsequently it was running at a speed somewhat in excess of the maximum permitted in the published list of permanent speed restrictions.

At the inquiry the driver of the 08.27 ex Bray Up train, who was injured in the accident, was unable to remember events on the day of the accident or during the preceding or succeeding weeks. Evidence from him regarding aspects of signals and compliance with the permanent speed restriction would have been helpful to the inquiry.

Neither the Killiney station foreman nor the guard of the 08.27 ex Bray Up train had observed the aspect of the Up Starting signal before giving signals that the station work was completed and that the train was ready to start.

It is RECOMMENDED THAT Irish Rail consider amending Rule 141(b) (e_{x}) tract from the Rule at Annex III) by inserting after "concerned"

in 7th line "and where practicable, that the signal controlling the starting of trains from the station, where provided, is displaying a Proceed aspect" and by inserting a similar amendment to cover the case of trains that operate without guards. This recommendation is not intended in any way to reduce a driver's responsibility for observing and obeying signals.

Since the accident at Dalkey the signalling system on most of the railway in the Dublin area, including the section between Dublin and Bray has been replaced. This re-signalling included centrally controlled multiple aspect colour light signals and track circuiting. Additionally, all trains using this section of railway are fitted with train radios and with either Automatic Train Protection or Continuous Automatic Warning Systems. The only passenger trains now scheduled to stop at Killiney are the electric multiple unit DART trains. Locally controlled semaphore-type signals are still in operational service on other sections of the railway network.

g. V. Feehen

Railway Inspecting Officer

³ October 1987

Annex I

REPRESENTATION

	Representing
Mr Maurice Kenny, Solicitor)	
Mr Sean Heneghan	Coras
Mr John Fennelly	Iompair
Mr Cecil Scully	Eireann
Mr Joseph McFadden)	
Mr Tom Darby	Locomotive Drivers
Mr John O'Driscoll)	Section of National Busworkers' Union
Mr David Tansey, Solicitor)	Philip Ryan, infant, an injured party.
Mr Edward Hughes, Solicitor)	DunLaoghaire Corporation

WITNESSES

CIE

John Fennelly, Manager, Dublin Suburban Rail
John Cotter, Senior Depotman
Laurence Cotter, Acting Senior Depotman
John Byrne, Depotman
Frank Maguire, Train Driver
Denis O'Brien, Train Guard
Richard Temple, Senior Depotman
William O'Brien, Senior Depotman
Damien Frawley, Bay Porter
Patrick O'Toole, Permanent-Way Department
Thomas Doyle, Train Driver
James Woods, Train Guard
Cecil Scully, Engineer
Matthew Deveraux, Assistant General Manager (Railways)

Sean Heneghan, Technical Manager, (Mechanical)

OTHER PERSONS
Maureen Gleeson
Veronica Ryan
Anthony Gray

Joseph McFadden, Engineer

EXTRACT FROM RULE 141

Starting of passenger trains

- (a) A passenger train must not be started before the time stated in public time-table.
- (b) Where platform staff are in attendance, the person in charge of the platform will give a signal to the Guard to indicate that station work is complete. This signal by day is given by one arm raised above the head, and at night, if the use of a handlamp is necessary, by a white light held steadily above the head. The Guard, after satisfying himself that all is right so far as he is concerned, must then give his signal to the Driver that the train is ready to start. By day the signal must be a green flag waved above the head, but in periods of bad visibility or at night a green light held steadily above the head. In addition, the Guard must use his whistle when necessary.

In the case of a Guardless train the platform staff will give the signal to the Driver who must ensure that the doors of all vehicles are properly closed and it is safe to proceed.

- (c) When no platform staff are in attendance, the Guard must see that station work is complete before signalling to the Driver.
 Before starting from an unmanned platform the Driver of a Guardless train must satisfy himself that the doors of all vehicles are properly closed and it is safe to proceed.
 To this end C.C.T.V. monitors and/or mirrors, where provided, must be observed.
- (d) Where bell communication is provided the Guard must give two bell signals to the Driver after obtaining an intimation from the person in charge of the platform that all is right for the train to proceed. Bell signals must be repeated by Oriver.
- (e) When there are two or more Guards, the signal to the Driver must be given by the Guard nearest the front of the train after he has exchanged signals with the Assistant Guard in rear, who must first have received intimation from the person in charge that all is right for the train to proceed.