

IRISH RAILWAY NEWS

Volume 2 Issue 3

July 1994



201 awaits transfer to Inchicore at Dublin Airport, 17th June 1994.

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Editorial

Again apologies for a late issue. The news content is, however, up to date although pressure of space has resulted in some items being carried over until the October issue. We hope to get back shortly to posting IRN on a date which corresponds with the cover although for various reasons the October issue will probably not appear until November.

During the coming year we hope to publish at least two issues with colour covers - a compromise decision reflecting the fact that some of our readers are sensitive to the increase in subscription rate proposed in the last editorial. New subscription rates, effective from the October issue, are shown on the inside back cover and are, hopefully, not too intimidating for the majority of our readers. We feel they are necessary to maintain and improve the quality of the magazine.

The highlight of the last few months is undoubtedly the long awaited arrival of new locomotives which combined with ongoing track renewal, the re-opening of the Athenry/Claremorris line and the improvement in services to Ennis give hope that the decline of recent years may be coming to an end. Another exciting development is the commencement of timber haulage by rail which although not yet very significant in volume terms, appears to have the potential to become one of the more important freight traffics on Irish Rail. The timber trains are doubly interesting in that much of the traffic is expected to originate in the West of Ireland at locations where freight haulage is currently either minimal or non-existent.

In Northern Ireland the Cross-Harbour link in Belfast is nearing completion, bringing with it the potential for much improved and better integrated services not to mention the cost savings arising from a single modern maintenance facility at York Road and the closure of Central Services Depot on the old Queen's Quay site at Bridge End. Further savings should arise from the greater ability to share rolling stock between the Larne line and the rest of the system and the elimination of the tortuous stock transfers between York Road and CSD via Antrim and Lisburn. With the Great Victoria Street project about to commence, the proposed upgrading of the Bleach Green Junction to Antrim section becomes ever more self-evidently logical in order to maximise the investments already made. Apart from facilitating a competitively timed Belfast-Londonderry service, such investment would enable the railway company to considerably expand commuter traffic from Ballymena, Antrim and intermediate points on the NCC mainline, as the journey time would be up to thirty minutes less than that which currently applies via Lisburn.

A. Gray 12/9/1994

Irish Rail

Dublin/Belfast Project

Signalling

The North trailing crossover at Balbriggan (No.7) remained in use until the closure of the cabin on Saturday 14th May and was thus the last remaining mechanically operated pointwork between Malahide and Drogheda, all other connections having been removed or disconnected pending commissioning of the new signalling and revised layouts. This latter took place during a possession commencing around 21:15 on 14th May and terminating at or around 17:00 the following day, Sunday. All of the existing cabins - Malahide, Rush, Skerries, Balbriggan, Mosney and Laytown - were in use at various times on the Saturday, although only Skerries and Malahide were still manned to pass the final trains prior to the changeover. These were the 20:15 to Belfast, 071 + EGV + 7 Mk2, and an Up empty carriage working, the latter almost an institution on Saturday evenings especially since the cancellation of the 21:05 ex Dundalk. The Belfast train was formed by the IR stock off the 18:00 ex Belfast so as to allow the usual NIR set to remain in Dublin to form the following day's 18:20 ex Dublin.

There were few, if any, commissioning problems of any significance and traffic resumed on the Sunday with a light engine from Dublin to Drogheda - the first passenger trains being the 18:20 Dublin/Belfast and 18:00 Belfast/Dublin. Due to inadequate accommodation on the Down train passengers for Drogheda and Dundalk were taken by bus from Dublin thus creating the mistaken impression of a problem with the commissioning. The 17:55 Dublin/Belfast ran, as intended, from Drogheda but was held until 18:45 to further relieve the 18:20 Belfast, the latter formed by 112 + 7 Mk2.

Following commissioning of the new signalling, the section of line from the existing CTC fringe, south of Malahide, up to and including the interface with the existing Drogheda interlocking was brought under the control of a new panel located in the recently enlarged signal box at Drogheda. All signals in this area have the prefix ND indicating "North Dublin" including those previously prefixed MH.

Commencing on Sunday 3rd July control was passed to a new CTC console located at Dublin (Connolly). This latter facility supersedes the previous "Suburban" console and is equipped with updated train signalling computers and tracker ball driven graphical display units. The new console is the control point for the Bray, Dalkey, Dun Laoghaire, Booterstown, Pearse, Connolly, Connolly West, Killester, Howth Junction, Howth and Malahide relay interlockings in addition to the new "North Dublin" solid state interlocking.

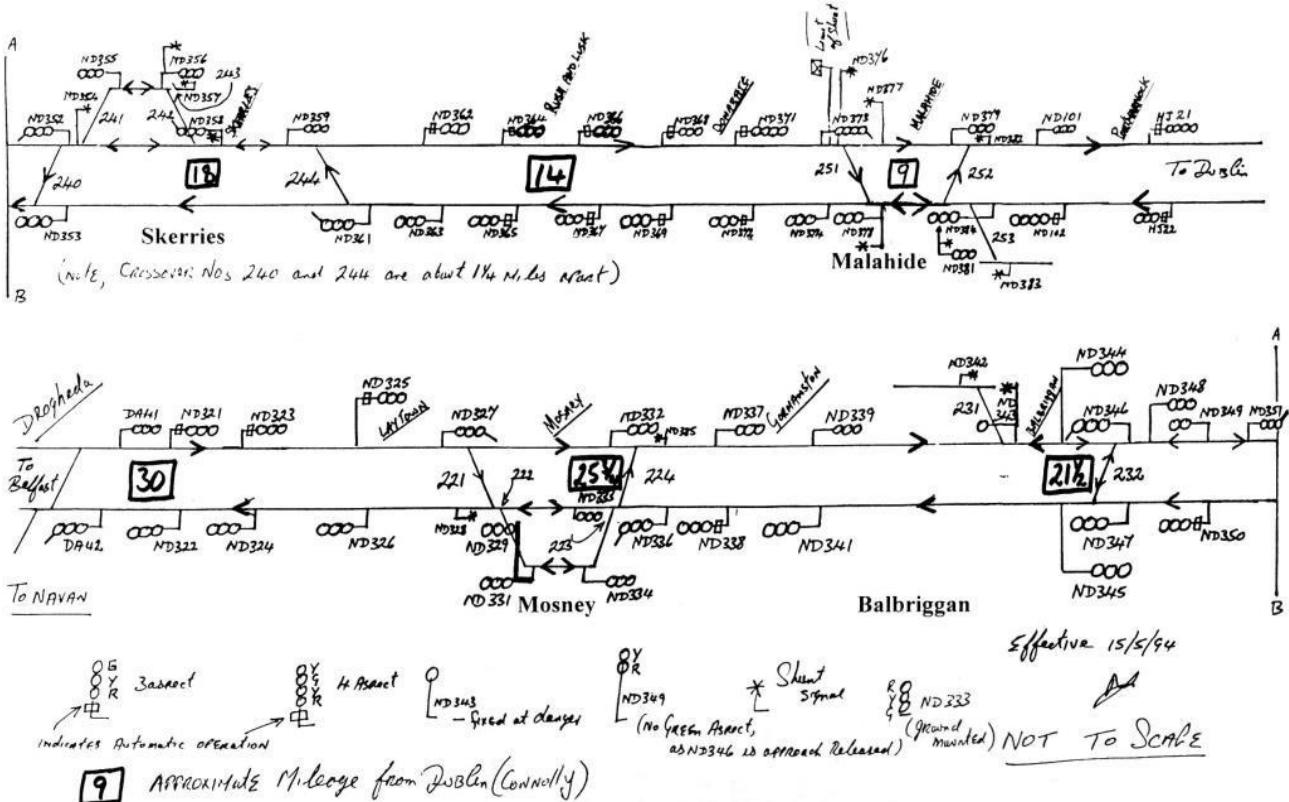
The fringe boxes to "Suburban" CTC are now Drogheda, Greystones, Clonsilla and Heuston. Auto-routing, a feature of the older console, is extended to include the enlarged area and, as before, signals are called automatically based on Train ID and track circuit occupation, in such a way that the least restrictive aspect possible is displayed to an approaching train. Controlled signals are normally only cleared on a "just in time" basis so as to avoid prematurely locking crossovers and other connections.

The continuous automatic warning system (CAWS) was extended from just north of Howth Junction to the boundary of the existing Drogheda interlocking with effect from 27th July.

One of the early beneficiaries of the new system is the 18:20 Dublin/Belfast which can get closer to the preceding 17:42 ex Pearse, without being blocked by it, and now sometimes succeeds in overtaking the latter at Mosney without previously encountering adverse signals. On occasions the 17:42 local train serves the Up platform at Skerries to allow the Belfast express to overtake on the Down line. The earlier view of approaching Up mainline trains has led to some reduction in delays at Howth Junction

though congestion at this location remains a major problem especially at busier periods. The new layout and signalling details are shown in the schematic which, needless to say, is not to scale.

NORTH DUBLIN RESIGNALLING



Bridges

The following bridges have been renewed - OBs 135, 136 and 137, all of which are located between Castlebellingham and Dundalk. This work is generally undertaken during a Saturday night/Sunday morning possession and does not involve any interruption of normal traffic. UB 134 in the same area was renewed over two weekends, the Up side on 18th/19th June followed by the Down side a week later. This work necessitated single line working between Dunleer and Dundalk and resulted in the cancellation and bus substitution of the 17:13 and 18:27 ex Pearse to Dundalk, at Drogheda, on 25th June. These cancellations were effected in order to avoid undue delay to the 17:00 and 18:00 ex Belfast.

As elsewhere the parapets of many of the underbridges between Dunleer and Dundalk have been raised, so as to retain the deepened ballast bed associated with the upgraded track now being installed in this area. Work commenced at the end of August on the installation of a floor of steel plating on OB 72, the Nanny viaduct at Laytown. As work progresses the existing arrangement whereby wooden sleepers are rigidly fixed to the way-beams will be abandoned and the track ballasted in the conventional manner - thus allowing the removal of the short lengths of jointed rail on, and approaching, the bridge.

Permanent Way

Track renewal has been proceeding apace with almost eight miles relayed between mid-May and mid-August in three separate sections:

Rush/Balbriggan (Down line)

MP 16½ to 18½

Castlebellingham/Dunleer (Up line)	MP 47 $\frac{1}{8}$ to 42 $\frac{3}{4}$
Gormanston/Balbriggan (Up line)	MP 23 $\frac{5}{8}$ to 22 $\frac{5}{8}$

In the case of the section between Castlebellingham and Dunleer a few hundred yards remains to be done under bridges 113 and 118 which have yet to be renewed. Some 57.2% of Irish Rail's portion of the Dublin/Belfast route now consists of concrete sleepers and CWR.

Rolling Stock

A contract, valued at IR£14m, has been awarded to De Dietrich of France for the supply of 28 coaches which are to be used on the accelerated Dublin/Belfast service, due to commence in 1996. The signing took place at Inchicore works on 6th September.

Permanent Way - General

Dublin/Cork

A further 4 $\frac{3}{4}$ miles approximately have been renewed since the last issue, 4 $\frac{1}{8}$ miles on the Up line and approximately half a mile on the Down line as detailed below:

Charleville/Kilmallock (Up line)	MP 128 $\frac{1}{4}$ to 125 $\frac{1}{8}$
Inchicore (Up line)	MP 2 $\frac{1}{4}$ to 1 $\frac{1}{4}$
Rathpeacon/Kilbarry (Down line)	MP 162 to 162 $\frac{1}{2}$

At the time of writing work had just commenced between Rathpeacon and Kilbarry to close the gap of 1 $\frac{1}{2}$ miles on both roads separating existing sections of CWR. When completed CWR will be continuous on both lines from Killarney Junction to just short of the mouth of Cork tunnel at MP 163 $\frac{1}{2}$. Preparations were also in hand for the renewal of the 6 $\frac{1}{4}$ mile section of the Up road between MP 113 at Emly and MP 106 $\frac{3}{4}$ at Limerick Junction. Current proportions of CWR installed on the Cork line are 93.7% on the Down line and 95.6% on the Up line.

In order to improve drainage and facilitate the raising of the track bed a program of overbridge renewal is underway between Portlaoise and Ballybrophy. At the time of writing in early August OBs 156, 162, 163 and 169 had been renewed and preparations, including the provision of access and working space, were evident at several other nearby sites.

At the June EU summit at Corfu, heads of government approved a number of trans-national projects, included amongst them the upgrading of the Cork-Dublin-Belfast-Larne axis. While the degree of additional investment remains unclear it appears that the Cork-Dublin segment would be upgraded to 175 km/h, an increase of 30 km/h over existing limits.

Cherryville Junction/Waterford

A further 2 $\frac{1}{2}$ miles of track has been upgraded with welded 54 kg/m rail and concrete sleepers, bringing the total mileage of CWR on the this route to 25 $\frac{3}{4}$ or 32.8% of the branch.

The latest section is from MP 76 to Lavistown gates and in addition to renewing the track the opportunity was also taken to ease the curvature by slewing the alignment westward for almost a mile between Highrath and Lavistown level crossings. Further work is expected to take place shortly on the Waterford side of Lavistown gates though there is as yet little evidence of the Lavistown bypass mentioned in previous issues.

Portarlington/Athlone

A further stretch of track has been renewed and upgraded - this latest section being the two miles from MP 47 $\frac{1}{2}$ to 49 $\frac{1}{2}$ on the Portarlington side of Geashill station. Total mileage of CWR on the Portarlington/Athlone branch is now 20 $\frac{3}{4}$ or 53.5% of the branch total.

Ballast retention plates and handrails have been fitted to UBs 63, 63A, 64, 65 and 66 in preparation for track renewal between Ballycumber and Clonnydonnin.

Athlone/Westport

A two mile stretch of welded rail on concrete sleepers has been installed from MP 80 to 82, between Athlone and Knockcroghery bringing the mileage of CWR on the branch to 8¾ or 10.6% of the branch.

Dublin/Rosslare

Renewal of the Up line between the former Shanganagh Junction (MP 12) and MP 10¾ is now complete, thus giving a continuous stretch of CWR from the Delgany bridge, just north of Bray, to MP 9¼, just north of Killiney station. The Up line between Bray and Pearse is thus 81.8% welded, the remaining section, between the 9¼ mile post and the south end of Sandycove station (MP 6¾ approximately), consists largely of bullhead rail on wooden sleepers and is fitted with check rail on the curves approaching and through Dalkey tunnel.

Signalling - General

Cabling to eliminate the overhead pole route between Athy and Carlow had been ploughed into the ground adjacent to the right of way by early June. It is reported that the eleven mile stretch was completed during a single possession lasting 9½ hours approximately. When this latest section is commissioned all signalling circuits between Cherryville Junction and Kilkenny will be underground and thus weather-proof.

Newrath No.2 level crossing has been converted to barrier operation and is now remotely monitored from Waterford West cabin by mean of closed circuit television.

Locomotives

The first of the ten new 3,200 BHP JT42HCW locomotives were delivered to Ireland in a most unconventional manner on 9th June being conveyed on board a Ukrainian registered Antonov 124-100, which touched down on runway 28 at Dublin Airport at 07:37.

The aircraft, registration UR82066, has a rated maximum take-off weight of 392 tonnes, including fuel and cargo. It is 45 metres long and has a wing span of 73 metres, the cargo area being 36.5 metres in length and 4.4 metres in height. The locomotive itself weighs in at 109 tonnes, is 20,949 mm long over buffers and 4,026mm at its highest point. The Antonov holds some 90,920 litres of fuel at take-off and would consume about 4,546 litres during take-off and 45,460 litres during the first hour of its climb.

The locomotive was built at the General Motors Locomotive Group facility in London (Ontario, Canada) and arrived at the local airport on Monday night 6th June, being conveyed on a 96-wheel flatbed trailer. The trailer was in due course reversed up a specially constructed ramp and the locomotive winched off and placed on steel rails within the cargo bay, being finally secured aboard the plane by around 01:30 Wednesday. Ninety-two steel chains as well as wood and steel buffering were used to ensure that no movement would take place during flight. Take off was reportedly around 13:15 on 9th June with refuelling stops at Montreal, Gander and Reykjavik.

Unloading at Dublin was a similarly protracted exercise and was not completed until around 05:00 on Friday 10th June, with the locomotive being conveyed to Inchicore via Ballymun, Church Street, the North Quays and Heuston Station during the early hours of the following morning. It was reportedly started on the Saturday afternoon and after the fitting of CAWS and train radio equipment made its first trip, running light from Inchicore to Kildare, on the morning of Tuesday 14th June - just over a week after leaving the manufacturer's plant. Later the same day 201 hauled a 10-bogie fertiliser train to Thurles departing Heuston around 15:30 and returning light to Inchicore on arrival. The following day

201 worked a trial train consisting of 8 Mk3s from Heuston to Limerick Junction and back, following the 13:35 Arrow service to Kildare and returning behind the 16:00 Arrow ex Kildare.

Various trials continued over subsequent days although it was Saturday 25th June before the locomotive went south of Limerick Junction travelling light to Cork in preparation for load and adhesion trials on the 1 in 60 gradient just north of Cork tunnel. The test train consisted of two water tank cars off the Ammonia train, five laden bogie container flats and ten laden fertiliser wagons, a combination weighing somewhat in excess of 1,000 tons. During at least one of the trials the test train was stopped and successfully restarted on the 1 in 60 gradient. The locomotive returned from Cork the following day working a standard sized laden Ammonia train which passed the Curragh at 19:09 - 201 did not, however, continue beyond Heuston.

The day previous to the Cork trip saw an official rollout ceremony at Inchicore during the course of which the locomotive was named “Abhainn na Sionnainne” - The River Shannon - by Mr Noel Treacy TD, Minister of State at the Department of Transport. Guests were then conveyed to Thurles aboard the Mk3 Executive train hauled by 201, which in addition to carrying its cast nameplate was also sporting the new Irish Rail corporate logo based on the Irish language name of the company - Iarnród Éireann - and also formally launched on this date. On the return trip the train continued to Heuston, although most of the guests disembarked at Inchicore.

Apparently in preparation for further deliveries of the class by sea, 201 worked onto the North Wall Extension on 1st July running via Sheriff Street level crossing and the “Point Store” car park before gaining the tramway at the East Link bridge. The track at the latter point had been realigned and partially relayed some weeks previously in anticipation of the requirement to accommodate the 201 class. Notwithstanding this trial, 202 and 203 arrived at the Ocean Pier aboard the Rotterdam registered JUMBOSHIP ‘Fairlift’ at around 05:00 on 21st July and were unloaded by one of the ship’s cranes onto a road trailer supplied by Allelys. As with the railcars in February, two road cranes, one of 350 ton capacity, were positioned on the nearby Alexandra Road to place the locomotives on the tramway for onward conveyance to Inchicore via Church Road Junction and the Southern link line.

201 commenced revenue earning passenger service on 29th July when it worked the Friday-only 10:20 to Cork and 13:45 return. These two trains operated as auxiliaries the following day and were again worked by 201, while on Sunday the locomotive worked the 10:15 to Cork and 14:30 return. With effect from Monday 1st August 201 was rostered to work the 07:30 Heuston/Cork and 11:20 return and did so on this and the following day. On Friday 5th August 201 worked the 07:30 and 16:45 from Heuston to Cork and the 11:20 from Cork to Heuston. The final trip of the day was at the head of a fertiliser special which left Cork sometime after 20:30. By 4th August 202 had commenced trial running, being observed at Kildare on this date. With effect from mid-August 201 and 202 were sharing the following duties, with one of the two engines being based in Cork:

07:35, 11:20, 14:45 and 19:00 Cork/Heuston
07:30, 10:45, 14:55 and 18:55 Heuston/Cork

Although trial running of 203 has commenced the locomotive had yet to be rostered for passenger duties as of 27th August. Further deliveries are expected by sea although it is likely to be November before the full fleet is available, and in traffic, at which stage some modest accelerations may be introduced. It is expected for instance that ten minutes will be shaved off the Dublin/Cork/Dublin schedule although this will be based on 90 mph running, the savings coming as a result of recent track upgrading and the greater acceleration delivered by the 201 class. The advent of the 201 class will release 071s for other duties and these latter will probably shortly appear on the Dublin/Rosslare service and the Northern outer suburban, both of which would benefit greatly from additional power and improved reliability.

Technical detail of the new fleet are as below:

Model Type	JT42HCW
Nominal Horse Power	3,200 / 2,387 kW
Nominal Traction Horse Power	3,000 / 2,238 kW
Minimum Continuous Tractive Effort	19,750 Kg
Minimum Continuous Speed	20.8 mph or 33.5 km/h
Maximum Speed	100 mph or 160 km/h
Maximum Height	4,026 mm
Length Over Buffers	20,949 mm
Maximum Width	2,639 mm
Bogie Wheelbase	3,708 mm
Weight	108,863 Kg (109 tonnes)
Fuel	4,542 litres
Engine	12-710G3B
Main Generator	AR8 transition alternator with integral rectifiers
Wheel Arrangement	Co-Co
Traction Motors	D43 axle-hung direct current
Bogie	GC flexicoil with vertical, lateral and yaw damping
Microprocessor	EM 2000
Head End Power	380 Volts AC, 3 phase, 50Hz

Irish Rail 201 Class

Other features include blended dynamic braking, engine exhaust silencing, reduced emissions and improved fuel efficiency. As with earlier locomotives constructed for Irish Rail there is a cab at both ends and in addition controls are duplicated on each side of both cabs.

- We hope to publish some performance details in the next issue - suffice it to say for the moment that the new locomotives are at their most impressive leaving Cork and well capable of accelerating to at least 47 mph by Kilbarry with a full set of 9 Mk3 coaches.
- The cost of the ten locomotives together with associated engineering works, mainly bridge upgrading, is understood to be the order of IR£20m.

The 001 class fleet continues to shrink. At the time of writing in early September 003, 005, 011, 012, 015, 036, 039 and 051 were in traffic. These locomotives now rarely appear on passenger trains and are most frequently seen on Navan/Dublin/Navan Tara Mines trains, the Kingscourt to Dublin leg of the Limerick-bound gypsum trains and occasional Ammonia train workings from Marino Point to Shelton Abbey. It is believed that a number of 001 class locomotives may be resuscitated for the beet season but that thereafter the remaining fleet will be rapidly run down as and when repairs become necessary. The formation of the 18:15 Limerick - Dublin (Heuston) on Sunday 4th September, 003 + GSV + 5 Cravens, was therefore somewhat unusual.

It is understood that both 132 and 174 have been permanently withdrawn from traffic, the latter as a

result of fire damage.

086 and 187 are now carrying the new Irish Rail logo although as yet no locomotives other than the 201 class have actually received the new livery (see cover photograph).

Railcars

The new railcar fleet entered service on 16th May to a somewhat mixed media and public reception. On the positive side the cars are bright and clean, have much improved facilities for disabled access, have excellent acceleration and braking and are fitted with double leaf sliding doors, the performance of which is at least on par with DART and very significantly better than the Mk3s. Incidentally each set of doors is fitted with an audible alarm which sounds throughout the door closing sequence irrespective of whether the closure is initiated centrally by the driver or by passenger push-button. A further welcome feature is the provision of emergency passenger to driver intercom facilities which are located both on the door bulkheads and in the toilet compartment. This equipment meets the requirement for passenger communication and replaces the archaic practice whereby a passenger can “pull the communication cord” and bring the train to a halt irrespective of the circumstances. When the intercom is activated a red light flashes on the exterior of the relevant car adjacent to the orange door-status lamp thus assisting the driver in locating the point of activation.



Cars 2610/13/06/05, forming the 08:13 ex Dundalk cross UB 72 at Laytown on 13th August.

Given the enviable success of DART there was probably a natural inclination to copy the proven product as much as possible, one of the results of which is that the seating in the railcars is almost identical in shape, height and width to that of the EMU sets. Unfortunately the public reaction to the seating and hence the general comfort of the railcars has been somewhat unfavourable, particularly in the case of longer distance travellers heading for Tullamore, Dundalk and Athlone. Indeed one wit was

overheard suggesting that the seats on the new Cityswift style buses operating the No.90 route from Heuston to Connolly were considerably better than the train.

Riding on continuous welded rail is excellent although the suspension is sensitive to imperfections and “soft spots”. Riding on jointed track is more variable but is certainly not up to the standard of a Mk2 or Mk3 in similar circumstances.

Despite some early problems, the cars have proven to be mechanically reliable and reasonably robust in service, although the auxiliary engine fan driven cooling system may require some redesign as this latter continues to be the source of much delay.

The railcars have arguably settled in best on the Northern outer suburban service as inter-station distances best match the performance characteristics of the cars with the maximum allowed speed of 70 mph being reached at or around the braking point for the next station. On the Maynooth line the cars again perform to good advantage although as stations are a little closer together or are separated by permanent speed restrictions it is rare for trains to reach full speed in any event. Between Heuston and Kildare, where the line limit is generally 90 mph, the 70 mph maximum speed of the railcars is clearly a handicap particularly as the stations are further apart and the tendency is to accelerate up to the car limit and coast on at between 55 and 70 mph thus producing a relatively unimpressive inter-station journey time.

As with the class 158 and other second generation DMUs on British Rail some years ago, there appear to be problems with track circuit activation with the result that a following train is not allowed to follow a railcar operated movement until such time as the railcar has passed within the protection of a controlled signal. This restriction has not proved much of a problem on the Belfast line as railcar-operated services are few and far between and in any event most signals are controlled. Likewise on the Maynooth line there is never more than one railcar set in service at any one time and signalling capacity is largely determined by the ETS controlled single line section between Clonsilla and Maynooth. The situation on the Cork line is different and considerable delays are being caused to other services as even without this problem it is debatable whether or not there is sufficient capacity to successfully handle both the railcar operated Arrow service to Kildare and Inter-City services, almost all of which either branch onto single line track or connect into and out of other trains which do so.

The seventeen railcars are allocated as under:

Inchicore	7
Athlone	4
Dundalk	4
Connolly	2
Total	17

While the Kildare local service is entirely new, the railcars have resulted in accelerated schedules on the Maynooth line journey times reduced from 45 to 35 minutes in the Down direction and 43 to 34 minutes in the Up direction. There are also two new services in either direction on Mondays to Fridays and one on each direction on Saturdays.

On the Northern outer suburban route Down trains between Dublin (Connolly) and Drogheda have had their running time reduced from 63 to 52 minutes for trains serving the ten intermediate stations. In the Up direction trains serving the same ten intermediate stations are up to 18 minutes faster with the journey time being spectacularly reduced from 69 to 51½ minutes. The punctuality of some of these accelerated services, notably the 08:13 ex Dundalk, has been disappointing not so much because of an

over ambitious schedule, but because of pathing problems at Howth Junction involving both the 08:30 ex Bray and 09:18 ex Howth which are due to depart at 09:21 and 09:25 respectively. The Arrow has the nearly impossible task of squeezing through at 09:22 and, if not successful in doing so, must follow the Howth train thus entailing a delay of about ten minutes.

The most controversial use of the Arrow railcars has been on the commuter service to and from Athlone with the general view being that the service has been downgraded as a result. Initially the existing 06:40 ex Athlone was deferred to 06:45 and despite the additional stops at Sallins, Hazelhatch, Clondalkin and Cherry Orchard arrival in Heuston was unchanged at 08:25. Punctuality was initially very poor due to temporary speed restrictions on the Athlone branch which were compounded by the signalling restrictions described elsewhere. In consequence the departure time was advanced to 06:38 with effect from 8th June with arrival in Heuston being maintained at 08:25 as previously. The 07:34 ex Kildare is advanced to 07:29 to provide additional signalling headway ahead of the Athlone train and now arrives in Heuston at 08:10. In the Down direction the 17:00 to Athlone was initially accelerated by eleven minutes to cover the 80½ miles in 99 minutes, inclusive of 9 intermediate stops. With effect from 8th June the schedule was extended by six minutes to give an Athlone arrival at 18:45. Ironically on 7th July the 17:00 to Athlone left Heuston at 17:06 and despite being blocked at Inchicore quite effortlessly completed the journey in 100½ minutes.

The following morning the 06:38 left sharp to time and despite signal checks and extended station stops arrived in Heuston at the booked time of 08:25. Passengers joined as follows:

Athlone (+35), Clara (+15/16), Tullamore (+50), Portarlington (+15), Kildare (+8),
Newbridge (+21), Sallins (+13), Hazelhatch (+6), Clondalkin (+8), Cherry Orchard (Nil)

A few people disembarked en route, principally at Clondalkin where about 8 people left the train, presumably destined for the nearby industrial estate.

The 06:00 (MO) ex Waterford was initially retimed to 05:55 and in addition to the regular branch stops was to take up the running of the all stations 07:34 Arrow ex Kildare arriving in Heuston at 08:15. Initially the Waterford train ran separately from the Arrow and to its original 06:00 schedule due in Heuston at 08:30 as previously. The railcars made their first trip on this service on 24th May, being formed by 2602/2601 and arrived in Dublin at 08:27 again running to the 06:00 schedule as far as Kildare. With effect from 13th June the Waterford “Earlybird” was altered to leave at 05:40 and take up the path of the all stations 07:29 Arrow service from Kildare, due in Heuston at 08:10.

It had been intended to operate a four-piece set on the 20:20 Heuston/Galway on Sundays, returning on Mondays at 05:35 in the path of the 06:45 ex Athlone. Following the retiming of the Athlone train the Galway departure was advanced to 05:30 but up to the time of writing at the end of August, the 20:20 ex Heuston has been loco-hauled as has the next morning’s “Earlybird” service from Galway.

Passengers travelling on the latter train have generally been required to change into the railcar set at Athlone, although on 29th August the 05:30 ex Galway was loco-hauled throughout, and did not serve intermediate stations between Newbridge and Heuston.

On Saturday 27th August the 07:00 ex Limerick was worked by a railcar set thus releasing the regular stock for an 08:10 Ennis/Mosney special.

As of the end of August railcars normally operate the following services which are marketed under the Arrow brand:

Monday to Saturdays

§ All local services	Dublin (Heuston)/Kildare/Dublin (Heuston)
05:45 (MF), 08:03, 10:40, 12:05§, 14:00, 16:10, 18:00, 19:45§ (MF)	Connolly to Maynooth
07:08 (MF), 09:15, 11:20, 12:50§, 15:05, 17:05, 19:00, 20:35§ (MF)	Maynooth to Connolly
08:13¶	Dundalk to Dublin (Pearse)
18:27¶	Dublin (Pearse) to Dundalk
11:05 ¹ 15:04¶ ² (SO), 15:40¶	Pearse to Drogheda
13:05 ³	Drogheda to Dublin (Connolly)
17:12¶	Drogheda to Dublin (Pearse)
05:40 (MO)	Waterford to Dublin (Heuston)
05:30¶¥ (MO)	Galway to Dublin
06:38¶ (MX)	Athlone to Dublin (Heuston)
17:00¶ (FX,SX)	Dublin (Heuston) to Athlone
17:00 (SO)	Dublin (Heuston) to Portarlington
17:05¶ (FO)	Dublin (Heuston) to Waterford

Sundays

09:50¤	Dublin (Heuston) to Waterford
14:45¶	Waterford to Dublin (Heuston)
20:20¶#	Dublin (Heuston) to Galway

¥ This train was still loco-hauled either to Athlone or throughout as of the end of August.

This train was still loco-hauled as of the end of August.

¤ Indicates that train is worked by a six-piece set.

¶ Indicates that train is worked by a four-piece set.

§ Additional service commencing 16th May 1994.

¹ Due to inadequate accommodation this train was worked by a Push/Pull set on Mondays to Fridays commencing in early July with a four piece railcar set being generally used on Saturdays. The displaced two piece railcar set works the 12:09 Pearse/Drogheda and 13:45 Drogheda/Pearse on Mondays to Fridays. It is expected that the arrangement detailed above will again take effect with the end of the summer season.

² This train operates to a non accelerated schedule.

³ Presently works the 13:45 Drogheda/Pearse on Mondays to Friday.

The tables give some idea of performance on the Northern and Maynooth outer suburban services:

Table 1: 19:45 Dublin (Connolly) - Maynooth
Railcars 2605/6, 5th July 1994

	(A) Distance (Miles)	(B) Sectional Allowance	(C) Actually Recorded	(D) Station Dwell Time
Dublin (Connolly)	0.00	0.00	0.00	N/A
Broombridge	3.08	8.00	6.21	0.11
Ashtown	1.41	3.00	2.33	0.24
Castleknock	1.71	3.00	(*) 3.20	0.26
Coolmines	0.88	2.30	1.51	0.21
Clonsilla	1.41	2.30	2.26	0.41
Leixlip (Confey)	2.90	4.30	4.02	0.17
Leixlip (Louisa Bridge)	1.25	2.30	2.15	0.24
Maynooth	3.65	5.30	(*) 4.55	N/A
Totals	16.29	31.30	27.43	2.44
		(B)+(E)	(C)+(D)	
Dublin-Maynooth	16.29	35.00	30.17	

(*) Journey time extended by temporary speed restriction or signal check

(E) An allowance of 30 seconds is allowed in each station, total for this trip 3.30.

Table 2: 18:27 Dublin (Pearse) - Dundalk
Railcars 2605/6/11/12, 1st July 1994

	(A) Distance (Miles)	(B) Sectional Allowance	(C) Actually Recorded	(D) Station Dwell Time
Dublin (Connolly)	0.00	0.00	0.00	N/A
Howth Junction	4.80	6.30	(*) 9.53	1.19
Portmarnock	1.90	3.00	2.56	0.23
Malahide	2.30	3.30	3.27	0.41
Donabate	2.44	3.30	3.24	1.59
Rush and Lusk	2.49	4.00	3.24	0.31
Skerries	4.03	5.30	5.11	0.37
Balbriggan	3.79	5.00	4.33	0.34
Gormanston	2.25	4.00	3.15	0.20
Mosney	1.79	3.00	3.05	0.22
Laytown	1.37	2.30	2.13	0.27
Drogheda	4.59	6.30	5.26	0.41
Dundalk	22.63	23.30	(*) 24.33	N/A
Totals	54.38	70.30	71.20	7.54
		(B)+(E)	(C)+(D)	
Dublin-Dundalk	54.38	76.00	79.14	

(*) Journey time extended by temporary speed restriction or signal check/stop at AHBs.

(E) An allowance of 30 seconds is for each station, total for this trip 5.30.

The Maynooth train, Table 1, actually departed at 19:53 and arrived in Maynooth at 20:23. Progress was assisted by a relatively light load and brief station stops although despite this, the schedule is clearly well within the capability of the units. The Dundalk train departed at 18:36, three minutes behind schedule, and was severely checked to Howth Junction by a late running DART losing more than three minutes as a result. Due to overcrowding the station stops at Howth Junction and Malahide were somewhat extended, while a disabled passenger accounted for the extra time spent at Donabate. Thereafter time was gradually regained to Drogheda which was reached in 54 minutes, two minutes over the allowance. The deficit at Drogheda was further extended by a signal stop in advance of the AHB crossings at Dromiskin and Commons together with a temporary speed restriction over the recently renewed UB 134. Despite the delays the accelerated schedule on this route is also within the capacity of the railcars, although punctuality of the 18:27 ex Pearse is dependent on the running of the 17:45 DART ex Bray which in turn is often delayed by the 14:55 ex Rosslare.

- It was extensively reported towards the end of June that CIÉ was close to agreement with the Japanese trading company, Mitsui, on a joint venture to manufacture railcars for the European market at Inchicore works in Dublin. The venture could employ up to 200 people, most of whom would be re-deployed from the existing Inchicore workforce. CIÉ investment in the project is put at about £2m.

New Work Practices

The successful conclusion of productivity negotiations together with further reductions in staff numbers have led to a number of changes, including the elimination of driver lodging turns which were previously a significant feature of working particularly on the Cork and Tralee routes. Driver rosters have thus become more complicated and can involve changing trains at one or more locations during the course of a day's work. Such arrangements are not assisting punctuality due, primarily, to the imposition of out of course stops on regular passenger services. For instance on 2nd August the 11:20 ex Cork was required to stop at both Rathpeacon and Sallins in order to ferry crews to and from Ammonia trains running in the opposite direction. These stops, although relatively brief, probably accounted for six or seven minutes of the twenty minute deficit on arrival at Dublin (Heuston).

Most stations on the Northern outer suburban line have been partially de-manned with, for instance, no staff in attendance at Balbriggan after 19:00 and no afternoon shift at either Rush or Laytown. A major drawback of these arrangements is that there is no way for intending passengers to enquire as to the status of the service they propose to use, nor is there any facility for making announcements at these stations in the event of cancellations or delays. Further, there is no covered accommodation on either platform at Laytown when staff are not in attendance. A similar situation applies at Balbriggan in respect of the Down platform.

Annual Report

The 1993 Irish Rail annual report was published on 22nd June along with those of the remainder of the CIÉ group companies. A few of the more interesting facts and figures are reproduced below:

- The cost of maintaining the railway infrastructure was IR£53.49m in 1993, a slight decrease on the 1992 figure of IR£54.46m. These amounts include maintenance and renewal of railway lines and works, signalling operating costs, depreciation and an apportionment of interest charges.

- Total railway revenue fell slightly from IR£114.3m in 1992 to IR£112m in 1993, a decline which was more than compensated for by the increase in the state grant from IR£90.4m to IR£94.1m. The 1993 surplus was thus IR£5.5m, an increase on the IR£4.6m reported in 1992.
- The railway company received EU grants towards infrastructure renewal of IR£12.8m in 1993 compared to IR£1.6m in 1992. Total spending under this heading in 1993 was IR£23.5m compared to IR£12.8m in 1992.
- IR£5m was spent on the new gantry cranes installed during the year in Limerick, Sligo, Dublin (North Wall) and Cork (North Esk).
- The Citygold service on the Dublin/Cork line, introduced in early 1993, has been very successful and generated revenues of IR£1m during the year.
- Mainline passenger journeys increased by 3.6% to 7.9 million and was accompanied by an increase in revenue of 2.9% to IR£42.4m. Journeys on DART and Dublin outer suburban services were marginally up on 1992 at 18.2 million but have yet to recover to the 1991 level of 19.1 million. Revenue from suburban services increased by 3.6% to IR£14.5m.
- Rail freight traffic declined in 1993 with reduced carryings of beet, minerals and general freight. Total tonnage fell 8.2% to 3.06 million tonnes, a trend reflected in receipts which were 10.46% lower at IR£18.4m. The decline in volume and revenue was largely due to the termination of the Freightliner contract which had resulted in the operation of two additional fifteen-bogie liner trains in each direction between Dublin and Belfast daily, except on Sundays. This latter contract commenced in March 1991 and, although initially expected to last six months, continued for the remainder of 1991 and most of 1992.
- Revenues from Irish Rail's catering services increased by 9.1% to IR£7.1m with profits reaching a record IR£308,000.
- The number of staff employed by Irish Rail at the end of December 1993 was 5,269 a reduction of 117 during the course of the year.

Coaching Stock

International Set

At least six of the carriages originally constructed for the BREL International Coach demonstration train have arrived at Inchicore, the first vehicle reaching the works by road on 26th June. The demonstration train was originally launched on 17th September 1986 and operated for a time between London (Euston) and Manchester before being mothballed.

These coaches are similar in many respects to standard Mk3s being 22.57 metres in length and 2.74 metres wide. Automatic swing plug doors are fitted, these being the first vehicles so fitted in the UK. There were originally six second class open saloons, two first class open saloons, a buffet car and a first-brake, the latter with two first class compartments, a conference room and invalid facilities. Five of the seconds had seats for 76 passengers in a somewhat unattractive and slightly cramped mix of face-to-face and face-to-back seating, the sixth having video facilities with all seats arranged in a face to back format. The first class saloons had 54 seats, all arranged in a face-to-face configuration with intervening tables. Exterior dot-matrix destination panels were fitted to the toilet windows while interior dot-matrix panels were fitted to the coach bulkheads. The firsts featured a number of "gadgets" including miniature fans and venetian blinds, the latter fitted between the leafs of the double glazing. It is understood that only nine of the original ten coaches have been purchased and given that the vehicles will have to be re-gauged and are likely to be extensively re-fitted it is unlikely that any will be in

traffic until 1995. Vehicles delivered so far comprise the buffet car, two standards and two firsts.

Cravens

Craven coaches Nos. 1509, 1519, 1524, 1525 and 1549 remain out of traffic having been significantly damaged in the Belview and Ballyseedy derailments. Given the length of time out of traffic there must now be some doubt as to whether or not these five vehicles will be repaired - a decision not to do so would reduce the fleet to 44 coaches.

Timber Trains

On Saturday 23rd July 171 and the experimental air-braked bogie timber wagon ran to Carlow where six further wagons which had been modified by a local contractor were attached. The train then ran to Ballina for loading, and over the course of the following few weeks made several return trips from Ballina, initially to Waterford, but latterly to Clonmel. On Tuesday 9th August the seven bogie train was observed on the Sligo line, passing Enfield at 12:22, en route to Longford where it arrived at 14:02, having dropped three wagons in Mullingar. The laden train was worked to Clonmel by 176 on 13th August and was observed passing Enfield at 12:24. On 22nd August 170 worked the same seven-bogie train empty from Adelaide to Londonderry returning light engine. The laden train left Londonderry at 16:07 on the 26th, hauled by 143, and crossed the 16:05 ex Belfast in the new loop at Killagan. It was worked forward to Dublin the following day by 135+129 and passed Mosney at 14:04. Wagons currently in use for the conveyance of timber are 30507, 30509, 30510, 30514, 30516, 30520 and 30538 (see also Atheny/Claremorris).

Disruption

The signal box at Maynooth was damaged by fire at the operating floor level on Sunday 5th June as a result of which the 14:35 ex Sligo, 078 + 6 Mk2 + EGV, terminated at Enfield at 17:16. Passengers were brought forward by buses and taxis, the last of which left at 19:12. It took several days to restore the cabin to a fully operational condition. For instance on the following Tuesday it was still not possible to run-round and as a consequence a number of locomotive hauled local trains were push/pull worked on this date although delays were minimal. Pilot working was required for several days between Maynooth and Enfield due to damage to the ETS instrument at the Maynooth end of the section.

Following a telephoned bomb warning to a BBC newsroom in Belfast the entire Dublin to Cork line, including Cork station was closed at 17:50 on 8th June. The 17:30 to Cork and 15:15 ex Galway were halted at Sallins, the 17:39 ex Kildare at Newbridge, the 14:20 ex Tralee at Portarlington, the Up Ammonia at Templemore, the 14:55 to Cork near Kilbarry and the 18:00 ex Limerick at Dromkeen. The line was gradually cleared with the assistance of the Gardaí although most of the stranded trains did not resume their journeys until around 20:00 and the entire line was not fully re-opened until after 21:00. The push/pull operated 18:00 ex Limerick returned from Dromkeen after about an hour as at that stage it was unclear just how long the delay would be.

In one of the worst incidents of its type to date, the overhead line equipment was severely damaged south of Tara Street station on 22nd July, so much so that the Down line conductor was severed immediately south of Pearse Street underbridge. The incident occurred as the 17:46 Connolly to Bray was leaving Tara Street station and, as the overhead equipment on both lines share a common support structure at this point, the opposite line was also affected thus bringing the 17:15 ex Bray to a halt just north of Westland Row overbridge. Services were initially suspended between Connolly and Sydney Parade, but following the opening of manual disconnects nearer the damaged section, were allowed to continue north as far as Lansdowne Road, reversing via the crossovers under the West Stand. The

14:55 ex Rosslare, already delayed by a locomotive failure, terminated at Bray and the 18:30 ex Dublin started from there. The 18:00 ex Rosslare terminated at Pearse and the set was stabled there overnight. Normal services resumed shortly after 07:30 the next morning - a notable achievement given the extent of the damage.

A small explosion occurred on board the 09:00 ex Belfast as the train arrived on platform 3 at Dublin (Connolly) at 11:34 on 12th September. A woman passenger from Drogheda was slightly injured but did not require hospitalisation. According to Gardaí a telephoned message was received from a Northern Ireland based terrorist group a few minutes earlier warning of devices planted in coach 935 on the train, at Connolly and Pearse stations and at various other locations throughout Dublin. Services, including DART, were disrupted for about 1½ hours. The 11:00 ex Belfast terminated at Drogheda while the 13:00 ex Dublin was an Irish Rail set and departed from platform 7 at Connolly around 13:30. Passengers on this service were required to change trains at Drogheda and arrived in Belfast shortly after 16:00 aboard the set of the 11:00 ex Belfast. These carriages were then held to form the 18:00 ex Belfast, the earlier 17:00 being formed by a six-piece 80 class railcar set. The 15:00 ex Dublin was formed by the 09:00 set although the service was somewhat delayed and did not reach Belfast until approximately 18:00.

Mullingar/Athlone

Movements on this section are few and far between at present due mainly to the reduced level of permanent way renewal on the Sligo line. So far as is known no freight trains have operated over this section since 1991 although the odd passenger special continues to run. Trains so far this year have consisted of the steam-hauled RPSI three-day Lough Atalia railtour which saw both ex-GNR(I) 4-4-0 No.171 and ex-D&SER No.461 in action between Mullingar and Athlone on both 14th and 15th May as part of a program that also included visits to Mostrim, Galway, Ennis and Navan. The only other recorded special was operated by the ITG and consisted of 015 + GSV + 7 Cravens + GSV which ran from Bray to Ballina, via Portarlington, and returned to Bray via Moate and Howth! This latter train ran on 21st August.

Ennis

The 07:30 ex Ennis was scheduled to run each weekday with effect from 16th May instead of Tuesday, Wednesday and Thursday as previously. This train was formed by 6102 3 p/p + 130 on 27th May and left Ennis at 07:33 on this date with about twenty-four passengers. The journey time to and from Dublin, including a change at Limerick, is 2 hours 55 minutes. The previous day the 17:35 ex Heuston arrived in Ennis at 20:56 with thirty-two passengers and consisted of 173 + 7 Mk3 + EGV, the original locomotive, 087, having been changed at Limerick. Given that the additional service was just a few days old and that the Limerick/Ennis line was closed from early February to mid-May the initial numbers could only be viewed as encouraging. Indeed given the development of Ennis as a major tourist centre there is probably scope for more than one train in each direction daily.

Athenry/Claremorris

The Minister of State at the Department of Transport, Energy & Communications, Mr Noel Treacy TD, announced in June that the railway between these two points will be re-opened to traffic as soon as engineering work has been completed at a “number” of level crossings between Claremorris and Tuam. The Irish Rail Managing Director, Mr Waters, indicated at the 201 launch ceremony in Inchicore that the “Western Freight Corridor” incorporating the Claremorris/Athenry line and linking Ballina, Westport and Claremorris to Limerick, Foynes, Cork and Waterford (via Tuam) would be inaugurated in August though, as yet, the line remains out of use pending commissioning of level crossing

equipment and the restoration of some form of signalling over the section.

It is reported that in addition to Westport, Claremorris and Ballina, facilities will be provided at Tuam for loading timber destined for delivery to the South East. In combination with the Foynes/Ballina coal traffic and export container shipments from Ballina and Claremorris via Waterford there should be sufficient activity to merit at least one freight train in each direction daily. Work preparatory to reopening has included the renewal of the wooden level crossing gates in the Southern yard at Claremorris.

Due to concerns about the general condition of the line and in particular of rails, fishplates and fastenings the entire section between Ennis and Claremorris was closed on 7th October 1991, but subsequently reopened to Gort on 13th January 1992 and to Athenry on 5th February 1992. The line between Tuam and Claremorris was actually severed for a time when rails were removed for re-use on the Ballina branch, which although never closed, was subject to an overall speed restriction of 25 mph between 7th October 1991 and 6th December 1992.

The level crossing at Ballindine Road, between Claremorris and Tuam, was re-commissioned with effect from 5th September and is now of the full barrier type with four lifting arms thus replacing the original gated crossing which was removed during the course of road widening in the area. The restoration of Ballindine Road crossing is understood to complete the work necessary to re-open the Athenry/Claremorris section and consequently a daily freight service was expected to start on the same date. Also from 5th September Tuam has been permanently closed as a block post, although some signals are retained to protect the level crossings at the station and on the nearby Galway Road. The entire 33½ mile section between Athenry and Claremorris is now worked by a manual staff which is normally kept at the Athenry end of the section.

Ballina Branch

The Western People newspaper recently reported that between 9th May and 25th July the Ballina branch service was substituted by buses on no less than 47 occasions - apparently due to staff shortage. The problem was still ongoing at the time of writing with the Friday-only 17:00 Heuston/Ballina being cancelled at Athlone on both 19th and 26th August. On the latter date the connections into and out of the evening Westport trains were also cancelled with buses being provided between Ballyhaunis and Ballina instead.

Claremorris/Collooney

The Western Inter-County Railway Committee is understood to have submitted an application in 1993 to the Minister of Transport, Mr Brian Cowen, seeking the restoration of services on this line. Although a positive response was not received to the £6m plan the committee has apparently received an undertaking from the Minister that the disused line will not be abandoned. The committee view the line not only as a means of transporting people, but also see potential for tourist projects in addition to the transportation of timber from the West and North West to the South East. The route closed to regular passenger traffic in 1963 and to all remaining traffic in November 1975. It is understood from reports in local newspapers that the above mentioned committee are in discussions with Coillte concerning the possibility of loading timber from various points along the route, although early developments are not thought likely.

Traffic

This section has been held over to the next issue due to pressure of space and time!

Dublin Transportation Initiative

There has as yet been no formal announcement of funding for the DTI projects beyond that contained in the National Plan, although it is now clear that the promised investments will not materialise at the level indicated given the embarrassing shortfall in European funding. It appears that funding will be reduced by at least 10% and the timescale for implementation extended. It is also generally accepted that the number of LRT routes will be reduced from three to two with that proposed for the former Harcourt Street line being the most likely to get approval in the near future. The Ballymun - Collins Avenue - Drumcondra Road - City Centre route is not now expected to be built before the end of the century.

As regards DART it still seems likely that the overwhelming logic of the proposed extension from Bray to Greystones will win the day although the acquisition of the necessary additional rolling stock for peak periods may well be dealt with at a later stage.

Dundalk

Construction of a new freight terminal in the Irish North yard at Dundalk was well in hand by the beginning of September. So far most of the redundant loading banks and other facilities occupying the area between the main line and the former Dundalk Junction to Clones line have been bulldozed away. To facilitate site preparation and other associated works Manisty's short siding was removed in early July and the longer sidings have been shortened so as to terminate at a row of temporary buffer stops which have been placed in line with the existing buffer stops of the remaining short sidings.

South West Corridor

Local services commenced on 16th May with 23 services from Kildare to Dublin on Mondays to Fridays and 22 on Saturdays. In the opposite direction the service is similar although the first Down train (MF) starts from Cherry Orchard at 05:54, while the second train, at 06:45 ex Heuston, does not run on either Mondays or Saturdays. All trains serve all intermediate stations except the 08:20 ex Heuston which runs non-stop to Kildare. The journey time for the 30 mile trip is forty minutes in the Down direction and forty-one minutes in the Up direction inclusive of the five intermediate stops.

Traffic to date has been modest and generally well within the capacity of a two-car set. Apart from Newbridge and Kildare, the busiest location is undoubtedly Sallins followed by Hazelhatch and Clondalkin. Traffic at Cherry Orchard is virtually non-existent, in part because of proximity to Heuston, and amounts to hardly a handful of passengers during the course of the day.

Sadly, it has been necessary to provide almost continuous security in the Cherry Orchard and Clondalkin area although apart from some extraordinary scenes of disorder on the launch date problems have been largely contained to the immediate vicinity of Cherry Orchard station. This latter, although built to be as vandal resistant as possible, has been extensively defaced with all vulnerable signage and lighting destroyed.

Track circuit actuated public address announcements herald the approach of all trains at the four unmanned stations although there appears to be no provision for special announcements in the event of late running or other disruption.

Reconstruction of Newbridge station was nearing completion by mid-August and has included the provision of full length platforms, new lighting, improved parking, revamping of the station buildings as well as a general re-paint.

At Kildare the booking office counter is re-sited within the main station building and much improved general waiting facilities are provided also within the main buildings on the Down platform.

The standard of the finished station reconstruction at Hazelhatch, Sallins and Kildare has drawn much favourable comment and shows what can be done when adequate funding is available.

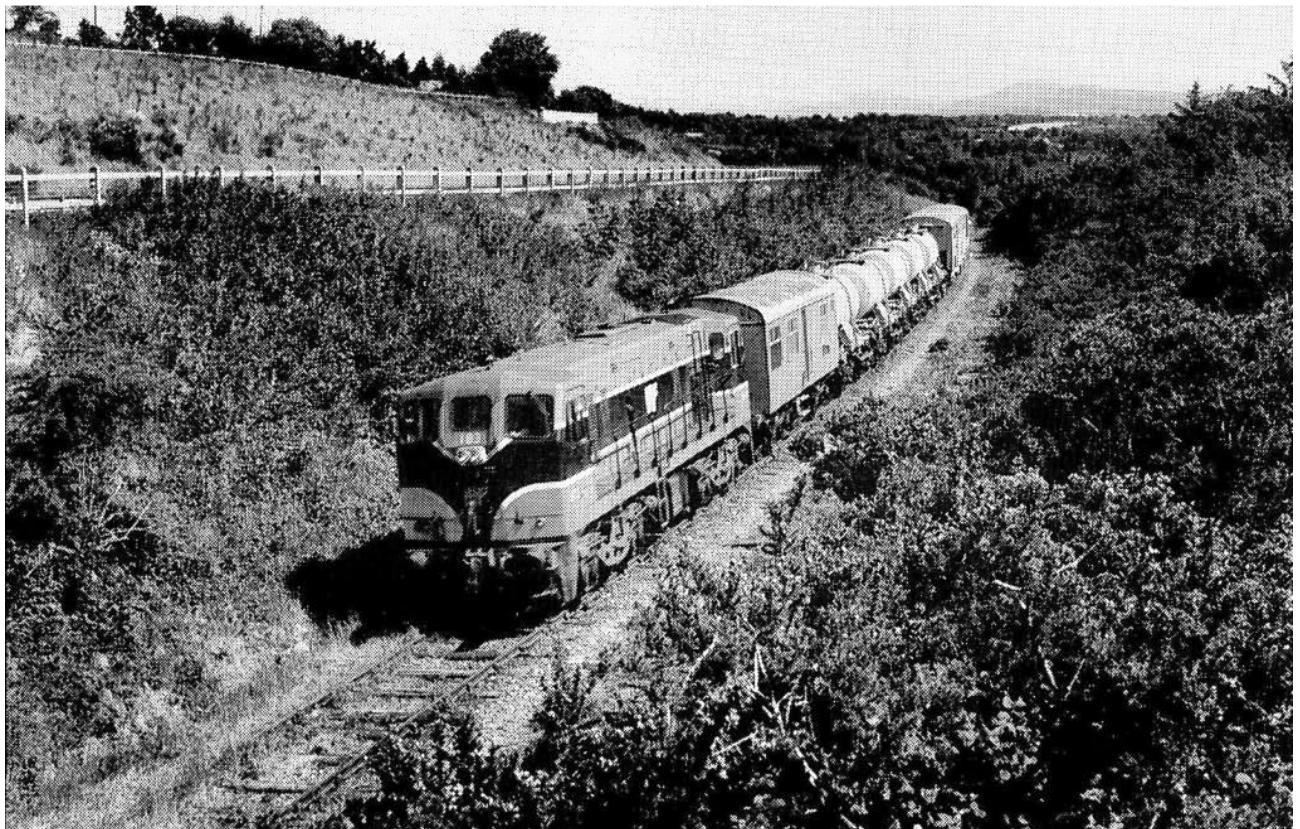
- The feeder buses to Clondalkin station from North and South Clondalkin mentioned in the last issue and shown in the current timetable from 16th May had not commenced operation by early September.

Accommodation Crossings

It is understood that some 274 accommodation crossings have been altered since 1989 to improve the line of vision both for the crossing user and approaching trains. There are apparently over 2,000 such crossings throughout the country and apart from improving safety for all concerned such modifications, together with the installation of cattle grids, are understood to allow the inclusion of the crossing in a special insurance scheme for farmers which was set up following discussions between the IFA, Irish Rail and FBD insurance. (The user is primarily responsible for the safe operation of this type of crossing and could be held liable for damages arising from improper use of the facility.)

Weed-Spray Program

The now bi-annual weed-spray program got off to a hesitant start this year due apparently to locomotive shortages and crewing difficulties. The program ceased prematurely towards the end of June at which stage the Dublin to Sligo, Athlone to Westport, Limerick to Claremorris, Portarlington to Galway, Ballybrophy to Killonan and Mullingar to Athlone lines had yet to be treated as had the Foynes and Ballina branches. Incidentally the train travelled from Waterford to New Ross and back on 15th June.



Loco 183 heads the weed-spray train a few miles south of New Ross on 15th June.

Boyne Viaduct

Following protracted discussions amongst various local groups and Irish Rail agreement has finally been reached on the floodlighting of the Boyne Viaduct at Drogheda. Work on the project is expected to commence shortly and take about a month to complete. The cost is estimated at £50,000 and will be borne largely by Drogheda Corporation, although the railway company is meeting a third of the cost while the ESB is waiving the capital contribution which would normally be charged to cover alterations to its supply network. In order to reduce expenditure the Viaduct will be illuminated from the town side only with a mixture of yellow and white lights to be bracketed from the piers of the Viaduct and positioned some 45ft from the ground. This structure, carrying the Dublin/Belfast mainline, is one of the most elegant and graceful pieces of railway engineering in Ireland and has long been one of Drogheda's defining symbols.

Galmoy

Planning permission has been granted for the development of a mine to exploit the zinc deposits discovered some time ago at Galmoy, Co. Kilkenny. Work on the proposed £50m investment may well begin this year and when completed the mine will produce some 120,000 tons of zinc concentrate each year. Although the site is within a few miles of the main Dublin/Cork line at Lisduff, there is as yet no indication that the traffic will be carried by rail or that there would be sufficient volume to justify a branch to the mine.

Fares Increase

A fare increase of approximately 6% was implemented with effect from 3rd August and applies to Inter-City, suburban and DART services. This is the first increase for three years.

DART - "10 Years On The Right Tracks"

The Howth/Bray electric trains completed their first ten years of public service on 22nd July and accordingly a number of stations, including Connolly and Pearse are decorated with bunting marking the anniversary. Leaflets and timetables were widely distributed in the DART catchment area advertising the service and the various local attractions along the route.

The first major change in operating practice since the introduction of the DART service commenced with the new timetable on 16th May after which date a six-piece set was rostered to work the 07:58 Bray to Howth Junction, 08:53 Howth Junction to Bray and 09:38 Dun Laoghaire to Connolly - all of which operate on Monday to Friday only. If these workings are successful it is expected that further six-piece sets will be introduced, a development that could lead to a more balanced service and less congestion at peak periods.

Catering Contract

Irish Rail invited tenders in mid-May for the provision of on-train trolley services offering "light snacks, teas, coffees and other beverages, cakes, biscuits, buns and similar snacks, also newspapers and magazines but not including the provision of full meals or alcohol" on a number of specified services namely:

- 07:00 Limerick/Dublin
- 17:45 Dublin/Limerick Junction/Limerick
- 05:20 Cork/Dublin
- 21:00 Dublin/Cork

12:40 Cork/Tralee
15:15 Cork/Tralee
09:55 Tralee/Cork
17:35 Tralee/Cork

The above trains currently either have no catering facilities or include unstaffed catering vehicles in their formation. Incidentally the only existing “on-train” private caterer withdrew the trolley service on the 06:45 Athlone/Heuston and 17:00 Heuston/Athlone shortly after the introduction of the 2601-class Arrow railcars on these services as the sale of tea, coffee and jam scones was no longer permitted due to the absence of tables in the passenger saloons.

Stations

- The platform at Clara has been raised and resurfaced with cobble-lock bricks as has the Up platform at Tullamore. This work was in hand during the last few weeks in May and apart from improving the general appearance of both stations has made disabled access much easier.
- Work had commenced by early September on the long promised refurbishment of Sligo station.



10:30 Boyle to Dublin (Connolly) GAA special at Glasnevin Junction on 21st August.

Miscellaneous

The new chairman of the transport holding company, CIÉ, is Mr Dermot O’Leary who has been a director since 1989. He is also currently a director and acting chairman of the airports authority, Aer Rianta, but apparently plans to relinquish this position in due course. Mr O’Leary established his own company, Crane Hire Ltd, in 1964. Mr Noel Kennedy, formerly managing director of Bus Éireann has been appointed acting group chief executive as, since the retirement of Mr G.T. Paul Conlon in June,

the chairman's position is non executive.

The newly elected West Mayo TD, Mr Michael Ring, is quoted as saying that he may have to abandon travelling by train to the Dáil if "delays and overcrowding" persist on Westport to Dublin services. On at least one occasion that the Deputy complained of school parties had been block booked on the regular service - a frequent source of overcrowding and annoyance on many trains on this and other routes during the early weeks of the summer.

It is reported that licensed catering facilities are to be provided in the space under three arches of the loop line at Tara Street station - the developer being Railway Refreshment Rooms (Ireland) Limited. Meanwhile planning permission has been sought by the Ulster Bank for the installation of automatic teller machines at both Connolly (Suburban) and Pease stations.

A 22-year-old man was badly injured when he fell under the 18:30 Dublin/Rosslare train as it traversed the tramway along the Quays at Wexford on 2nd August. The accident was brought to the attention of the crew by a passenger who witnessed the mishap, although by this time the train was nearing Rosslare Strand - almost six miles from the scene. It is understood that the injured man lost both legs and that he was also in danger of losing an arm.

A man in his 30s was fatally injured when struck by a DART at Blackrock station around 19:30 on 23rd May.

A study supported by the European Commission and entitled "Getting the prices right" has calculated the social and environmental costs of transport by road, rail, sea and air and has concluded, in respect of the first mentioned mode, that the costs of air pollution, climate change, noise, accidents and infrastructure are only partly covered by road taxes (in all European countries) and proposes a Europe-wide scheme for incorporating these unpaid costs into taxation.

A lone raider, apparently armed with a sawn-off shotgun, raided Seapoint station at around 07:00 on 7th June and escaped with about £200.

Northern Ireland Railways

Cross Harbour Link - Position As Of Mid-August

Installation of trackwork on the Cross Harbour link was well advanced by the beginning of July with almost all track in place from Yorkgate to a point just short of Lagan Junction. The buffer stops on the Up Larne line at Yorkgate were removed in early June to facilitate the operation of ballast trains, tampers and other on-track equipment. The first locomotive, MV 108 ran onto the new line from the Yorkgate end on 17th June hauling a train of loaded ballast hoppers and is understood to have proceeded at least as far as the Co. Antrim side of the river crossing.

Installation of Lagan Junction commenced during July and culminated in a series of weekend line closures between Belfast Central and Bridge End. Although already partially installed, completion of the trackwork at Lagan Junction together with associated signalling and layout alterations at Belfast Central was required. Track realignment, including the removal of the cant on the Bangor line at Lagan Junction, saw the Belfast to Bridge End section closed on the weekend of 23rd/24th July and from 20:00 on Thursday to 22:00 the following Sunday, and on three successive weekends commencing on 28th July. Linking bus services were provided to bridge the gap, supplemented by a direct service from the City Centre to Bridge End, the latter during peak hours only. An interesting aspect of these possessions was the stabling of CSD based rolling stock at both Lisburn and Portadown. For instance on 22nd July

the 20:15 ex Dublin, 112 + 8 Mk2, terminated at Portadown and passengers were transferred to a DEMU for the remainder of the journey. Earlier the carriages for the following morning's 08:00 ex Belfast were worked from CSD to Lisburn by 113 with 111 attached at the rear. This train returned empty to Belfast on the 23rd, this time with 111 leading. After departure of the 08:00 for Dublin 111 remained at Belfast Central to act as station pilot as it was not possible to run-round at Belfast Central on this date. Other stock stabled at Lisburn on 22nd July were 3-car 80 class sets 82, 87 and 98. At the time of writing in late August work was proceeding on the installation of the signalling system which is expected to be commissioned in October.

The four turnouts on the viaduct section, one at Yorkgate, one above the former Queen's Quay station and one at either end of the Donegall Quay loop conform to the "EV 15/21" standard and are designed for 50 mph operation. In view of the elevated and exposed nature of the trackwork at these locations point heaters will be provided to avoid problems in cold weather.

Dublin/Belfast Project

NIR have awarded the contract for the supply of the 69,000 concrete sleepers mentioned in the last issue to J.H. Turkington & Sons who are based on the Mahon Industrial Estate in Portadown (European Journal S105/123).

Tenders have been invited for the design, supply and installation of a new signalling system covering the 34 mile section of the Dublin/Belfast line between Lurgan and the border. The work will include the signalling of a revised and improved layout at Portadown as well as the modernisation of the level crossing at Poyntzpass. It is not clear whether the contract also includes the conversion of the three crossings in the Lurgan area although it would be surprising if that was not the case. The contract must be completed no later than July 1996 (European Journal S109/133).

Pending track renewal and upgrading new speed restriction boards have been erected on the Down line just beyond Lisburn and on the Up line approaching Adelaide. The new boards indicate an overall speed restriction of 40 mph on both lines between Belfast and Lisburn. Similarly 30 mph boards are in place approaching Dunmurry and cover the station, level crossing and emergency trailing crossover. These temporary restrictions are understood to have taken effect from 9th July.

With resources concentrated on the installation of trackwork on the Cross-Harbour link there has been little relaying activity on the cross-border project beyond that reported in the last issue.

UB 204 at Jerretspass was renewed during the course of a possession which closed both lines between Newry and Poyntzpass from late Friday 19th August to the early hours of the following Monday. The nearby UB 203 has also been receiving attention and in addition to having its decking partially renewed has had steel plates fitted on either side to act as ballast retainers.

York Road

The new running shed at York Road is nearing completion and will accommodate three elevated tracks, each 190 metres in length. The building is 12 metres in height and 20 metres in width and is fitted with a 5 ton overhead crane, capable of traversing its full length.

Great Victoria Street

The Great Victoria Street project is not now expected to be completed in May 1995, as originally scheduled, due to unanticipated difficulties in obtaining official planning permission. It appears the delay will be of the order of several months. The new housing to replace existing residences in the path of the City Junction to Westlink Junction chord is nearing completion and can be seen on the Down

side adjacent to City Hospital halt.

Annual General Meeting

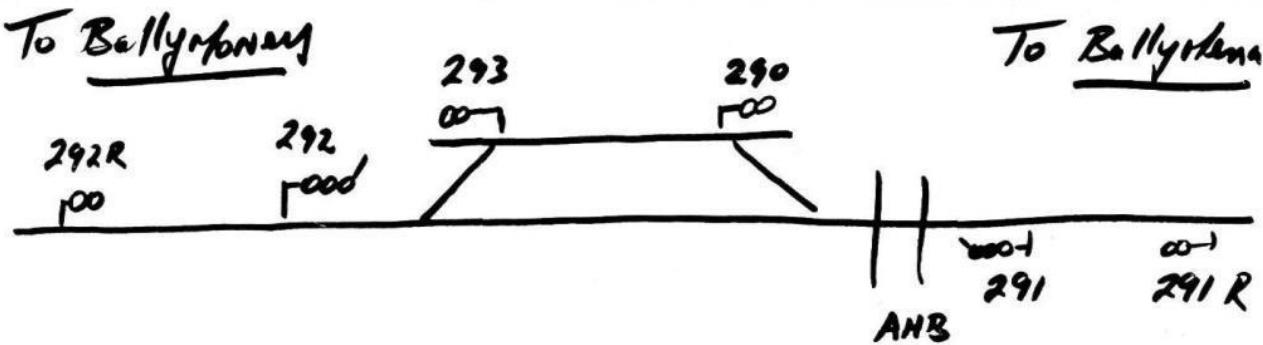
The 26th Annual General Meeting of Northern Ireland Railways took place at the Stormont Hotel, Belfast on 15th June. The chairman's statement revealed that during the 1993/94 financial year passenger journeys rose from 5.2 to 5.7 million with a corresponding increase in receipts of 7.3% to £8.8m. While there was a particularly strong growth in cross-border travel all routes contributed to the growth in volumes. The surplus from combined freight operations rose 9.8% to £717,000 - in part because of rationalisation of the company's cost base during the year.

The Chairman expressed the hope that approval will be given this year for the upgrading of the Bleach Green/Antrim line to permit the re-introduction of passenger services over the ex-NCC route from York Road to Antrim via Templepatrick. The Belfast/Antrim journey time would thus be reduced by almost 30 minutes as the route via Bleach Green is not only shorter but potentially much faster than the current route via Lisburn and the former GNR(I) Lisburn/Antrim branch. The upgrading of the line would involve the installation of about fifteen miles of CWR, the provision of two crossing loops, the modernisation of five level crossings and the re-opening of stations at Monkstown, Mossley and Templepatrick.

The Chairman also announced that an investment study was underway into the options for replacing the 80 class railcar fleet given that partial or complete electrification of the NIR network has now been rejected as unviable.

Signalling, Layouts And Level Crossings

Control of the Ballymoney station area was transferred to Coleraine cabin with effect from 12th June. The Coleraine/Ballymoney section, already track circuit block operated, came fully under the control of the Coleraine signalman on the same date. Ballymoney survived as a block post for a few weeks longer, however, as the section to Ballymena continued to be controlled by tablet instruments until mid-July. Similarly the functions of the panel controlling the station area at Ballymena were transferred to Coleraine with effect from 27th June, although the signal box continued to be staffed until the cessation of tablet working.

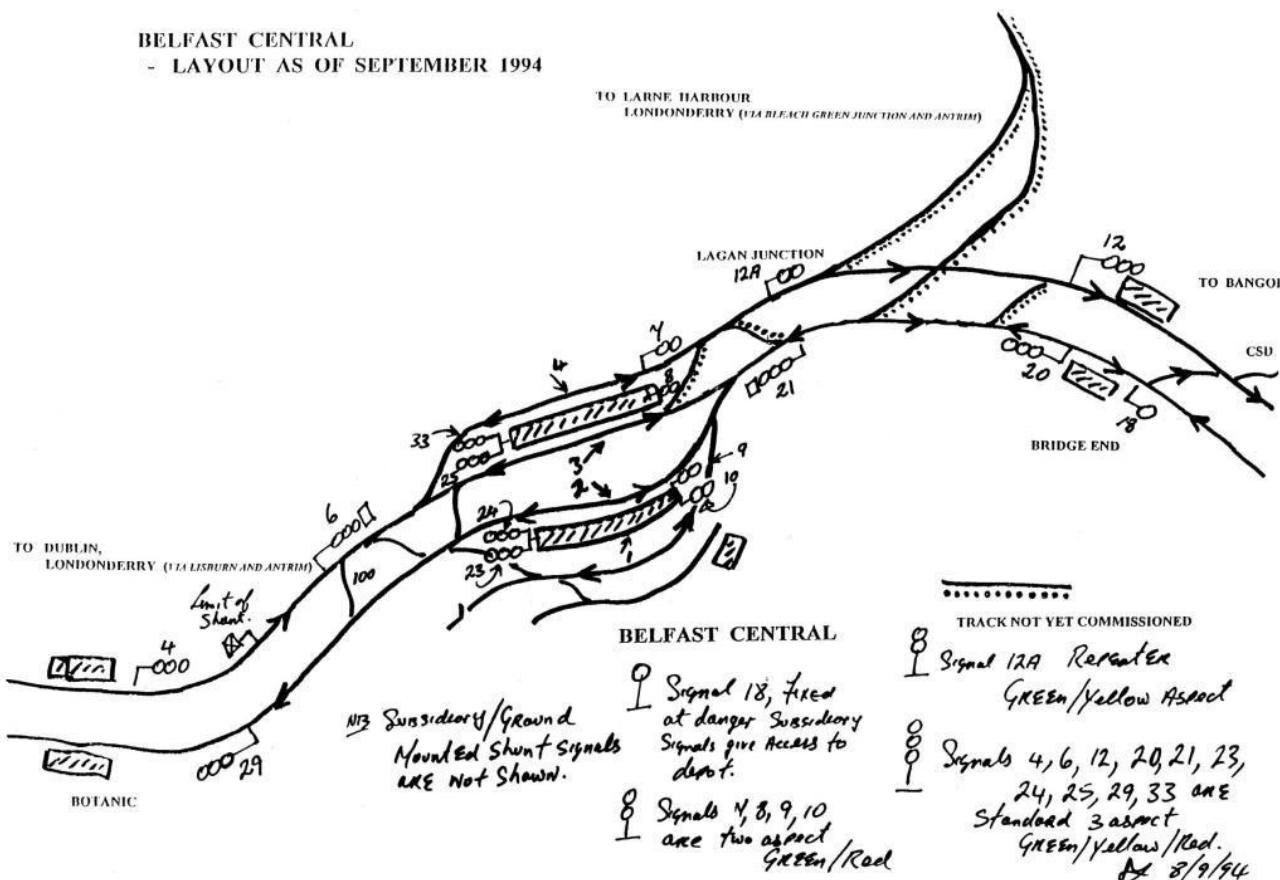


New Layout and signalling at Killagan, Ballymena/Ballymoney section.

The new loop at Killagan, mid-way between Ballymena and Ballymoney, became operative with the introduction of track circuit block working between these two points. At the same time two new two-aspect section starting signals were brought into use at Killagan - CE 293 at the Ballymoney end of the loop and CE 290 at the Ballymena end. The Up and Down distant and home signals, 292R, 292, 291R and 291, were installed some time ago in connection with the level crossing renewal program and up to

now simply afforded the opportunity to stop trains in mid-section should the necessity arise. As at Magherabeg, between Antrim and Ballymena, the home signals are three-aspect and, when cleared, read either into the loop (yellow with route direction indicator) or into the forward section (green). The connections from the mainline to the loop are by means of crossovers rather than turnouts and in consequence trains can be routed into the loop without reversing the points at the opposite end. It is thus possible to normalise the loop entrance crossover as soon as the arriving train clears the fouling track circuit and thus a route along the mainline can be set up at the earliest possible moment. Indeed this type of layout arrangement is so effective that crossings have been observed at Magherabeg in which neither train has actually stopped.

The new trailing crossover, No.100, located just west of Belfast Central and mentioned in the last issue was commissioned during the weekend of 5th/8th August. The existing westbound platform starting signals, Nos. 23, 24, 25 and 33 are converted from two to three aspect operation in the case of the first three mentioned, while No.33, previously fixed at danger now has a fully functional three aspect head. These four signals now read to No.29 and being 3-aspect also act as a repeater for the latter thus making signal No.29A redundant. The home signal from the Dublin direction is repositioned so as to protect the new crossover as is ground-mounted subsidiary signal No.28. The net effect of these changes is to provide a route westbound from Platform 4 towards Botanic.



At the east end of the station, also during the weekend of 5th/8th August, the existing trailing crossover, No.110, was reversed but is not yet re-commissioned. The existing facing connection, No.107, linking No.4 platform with the Up Bangor line has been removed and is replaced by a similarly located connection linking Platform 3 with the Down Bangor line. This latter alteration will, when commissioned, permit movements in either direction between Platform 3 and the Down Bangor/Larne line without interfering with movements in either direction between the Up Bangor/Larne line and

Platforms 1 or 2. A further (trailing) crossover is in place just east of Lagan Junction and when commissioned will allow eastbound wrong line movements from Platforms 1 and 2 to regain the Down Bangor line at the earliest possible opportunity after Lagan Junction. With effect from 8th August Eastbound movements from platforms 1, 2 and 3 are being routed “wrong line” as far as the existing trailing crossover on the Bangor side of Bridge End station.

On the Larne line itself the panel at York Road was been taken out of use to permit its transfer to Belfast Central. Temporary facilities to control essential routes were provided at both York Road and Whitehead and a modified timetable was introduced to cover the period between 25th July and 28th August inclusive. All intermediate controlled signals between York Road and Whitehead were converted to automatic operation with the route set at Bleach Green Junction for the Larne line. The Whitehead/Larne Harbour section was operated under “One Train Working” arrangements and a manual key token was carried by all trains traversing the single line section except for the 07:25 ex Larne Harbour and the 17:00 ex York Road which were passed under the control of a pilotman. All signals between Whitehead and Larne Harbour were fixed at danger while all points were clipped out of use except those controlled by the two temporary panels already mentioned. Special arrangements were in force to pass trains between York Road and Antrim and required the attendance of staff at Bleach Green Junction. During this period the Up line between Monkstown and Bleach Green Junction was taken out of use and all trains travelled via the Down line and in the case of Up trains, were required to traverse the emergency crossover located on the Whiteabbey side of the junction.

Larne Line Singling

Due to the undermining of the sea wall near MP 12½ the Carrickfergus/Whitehead section was temporarily singled with effect from 29th August. In order to minimise alterations to the signalling system trains are currently operating over the Up line between Carrickfergus and MP 12¼ and the Down line between this point and Whitehead thus avoiding the Up line in the vicinity of the damaged sea wall. Up trains are routed via the facing crossover west of Whitehead station while Down trains use the facing crossover east of Carrickfergus station. Tablet instruments recovered from the Ballymena to Ballymoney section have been installed at Carrickfergus and Whitehead and these are interlocked with the Down starting signal at Carrickfergus (465) and the Up starting signal at Whitehead (476). Track circuit block working is presently suspended between Carrickfergus and Whitehead and the intermediate automatics on the Up road, 472R and 470, have been taken out of use. A further temporary timetable commenced on 29th August and is effective until further notice.

Traffic

A three car Castle class set, No.458, worked two special trains to Newry on Friday 27th May departing Belfast at 14:50 and 16:55. These additional services were provided as auxiliaries to the following 15:00 and 17:00 services to Dublin.

On 28th May the 08:05 Londonderry to Belfast was extended to Bangor in order to facilitate passengers travelling to the D-day commemorations in the town. Due to heavy traffic on the 09:00 Belfast/Dublin service a relief train ran from Newry to Mosney on this date, returning empty to Portadown. An additional service was provided from Bangor to Portadown later the same day to facilitate passengers returning from the D-day events.

The Sunday School season started on 4th June with specials to Portrush at 08:50 ex Bangor (69+4+95) - set 1, 09:10 ex Portadown (84+4+89) - set 2 and 09:35 ex Londonderry (90+3+83) - set 3. The Bangor special was strengthened at Belfast Central by the addition of a further 3-car set, No.86. The regular 08:25 ex Belfast, set 4, was made up to eight vehicles, 2+81+4+94 and ran to Portrush instead of Londonderry. Return trains were at 18:15 to Bangor (set 4), 18:30 to Portadown (set 1) and 1945 to

Londonderry (set 3). The latter was attached to the 18:10 ex Belfast at Coleraine.

The annual AEEU charter from Belfast to Bangor ran on 8th June leaving Belfast at 13:30 and formed by 86+4+81. An 09:07 Portadown to Portrush special operated on Saturday 11th June and was formed by a nine-piece set consisting of motor coaches 94, 93 and 95. On this date also, the 11:05 ex Londonderry (83+3+86) ran to Portrush and was attached to the 10:05 ex Belfast at Coleraine.

The Irish Rail executive train, 071 + EGV + 4 Mk3, formed an 07:35 Dublin to Coleraine special on 17th June. After a layover of some six hours the train conveyed the party to Cultra before returning empty to Dublin, via Bangor.

Castle class set No.456 worked an 09:50 Portadown/Bangor special on 18th June just ahead of the regular 09:55 Portadown/Bangor service. Other specials included a Dunmurry to Portrush working formed by a nine-piece set (69, 95 and 94) and an 09:20 Londonderry to Portrush formed by 91+2. Also on this date the RPSI-owned dining car No.2422 was taken from Dundalk to Belfast as part of a liner train. The vehicle was moved from Adelaide yard to Cultra the following day with 111 leading and 113 at the rear. The trailing locomotive acted as a buffer stop on the mainline at Cultra while 111 shunted the museum siding before eventually retrieving the GNR directors' saloon, No.50, which was being exchanged for 2422. 111 + 50 + 113 then ran to Belfast via Bangor. A similar working was observed on 22nd June when MV108 + 548 + MV106 ran from York Road to Antrim where 548 was stabled. The lead MV then operated a CE Department train while 106 ran light to Portadown. The coach was eventually worked to CSD by 111 which had earlier been on duty with the Irish Rail weed-spray train and which also worked No.50 from CSD to Whitehead, before returning to Antrim with a rail wagon attached at York Road.

The 07:10 Belfast/Londonderry was formed by a nine-piece set on 23rd June and consisted of Motor coaches 87, 81 and 96. The return 09:40 ex Londonderry called additionally at Culmore and ran to Portrush to cater for Sunday School parties. The return working was at 18:55 ex Portrush and was formed by the same set which then returned empty to Belfast. A special train also operated on this date from Belfast to Mosney to accommodate a group of about 260. This latter train was due to depart at 09:25 and consisted of 91+4+94. The party returned on a three-car set, 90+2, which left Mosney at 17:40. Because of the commitment of 80 class vehicles to specials GM 111 + 5 Mk2 worked the 08:15 Bangor/Portadown, the 09:55 Portadown/Belfast, the 16:05 Belfast/Londonderry and the 19:00 Londonderry/Belfast.

Special trains on 25th June included a 10:25 Belfast to Drogheda and 16:40 return which was formed by 91+4+92 and an 09:05 Belfast/Portrush (empty to Lisburn) which was due to return at 18:15 and was formed by a nine-piece set, motor coaches 89, 93 and 84.

On Sunday 26th June there were specials at 09:00 and 09:30 from Belfast to the Curragh for the Budweiser Irish Derby. These workings were formed by 112 + 6 Mk2 and 113 + 11 Mk2 respectively, the 09:00 providing first class accommodation only. A total of about 600 people travelled on the two trains which arrived in the Curragh at 11:56 and 13:21 respectively. The latter was hauled by 131+133 from Dublin (Connolly) where a reversal is required, as the train was too big to run-round. Both sets ran empty to Dublin (Heuston), via Kildare, to be serviced. The first special, 112 + 6 Mk2, returned to the Curragh, via Kildare, and departed for Belfast at 18:10. The second special, 133/131 + 11 Mk2, returned to the Curragh, via Portarlington, and departed for Belfast at 19:04.

On 2nd July two specials operated, an 09:20 Londonderry/Portrush formed by 93+4+82 and a 10:25 Belfast/Portrush formed by 85+2+95+4+92. The regular and somewhat delayed 10:05 Belfast to Portrush service was formed by 89+2+91+4+196 on this date and was held at Ballymoney until 11:59 to cross the 11:05 ex Londonderry. This latter, formed by 86+3+69, left Ballymoney at 12:16 having crossed the 10:25 ex Belfast which passed at 12:13. The three Portrush trains mentioned had a

combined passenger complement of about 1,200 people.

The 09:40 ex Londonderry was a through train to Portrush on 4th and 5th July being formed by 96+2+93+4+82 on the first date and 87+2+93+4+82 on the second date. The return special on both dates was at 18:55 and was formed by 82+4+93.

On Wednesday 13th July a series of specials were provided to take bands and spectators from Portadown to the “Sham light” at Scarva as detailed in the tables below. Also on this date a party of approximately 1,200 people travelled on two special trains from Lurgan to Bangor which were scheduled to depart at 09:55 and 10:05. The outward Bangor specials were formed by 456+2+452+4+451 and 113 + 10 Mk2 respectively. The first return special, 18:25 ex Bangor, was formed by the nine-piece Castle class which subsequently returned (empty) to its base at York Road. The second special, at 18:35 ex Bangor, was formed by a nine-piece 80 class set as per note (10) below thus releasing the locomotive and coaches for use on the regular 17:00 Belfast/Dublin service, which consisted of 113 + 8 Mk2 on this date. In order to assist in the smooth operation of the Portadown/Scarva specials a temporary block post was established at Scarva to split the Portadown/Poynzpass section and this was in operation for about two hours in the morning and three hours in the afternoon. As indicated by notes (7) and (8) all return specials used the Up platform at Scarva in order to eliminate congestion on the narrow pathway leading to the Down platform.

In connection with a concert at the RDS in Dublin on 15th July a 14:00 Belfast/Dublin and 23:59 Dublin/Belfast operated and were formed by 81+2+83+4+96.

Due to heavy traffic on 16th July special auxiliaries were provided 15 minutes in advance of the 11:00 Belfast/Dublin and the 15:00 Dublin/Belfast. These trains were formed by 93+4+82 and passed Laytown at 12:41 and 15:17 respectively. The same set was used to form a 17:55 Dublin/Belfast auxiliary the following day leaving Belfast empty at about 14:00.

Set	Service	Formation	Time	Load	Notes
	09:00 Belfast/Dublin	181+5Cr+GSV	09:49/09:51	250/260	(1)
A	10:00 ex Portadown	89+4+96	10:15/10:18	500	(2)
B	10:15 ex Portadown	95+2+83+4+84	10:40/10:43	450/500	(2)
C	10:30 ex Portadown	81+4+94	10:56/10:59	480/500	(2)
A	10:45 ex Portadown	89+4+96	11:13/11:17	460/510	(2)
B	11:00 ex Portadown	95+2+83+4+84	11:28/11:32	750	(2)
	11:00 Belfast/Dublin	074+6Mk2+EGV	pass 11:56	130/160	
C	11:45 ex Portadown	81+4+94	11:56/11:59	90/100	(2)
A ¹	ECS to Dundalk	89+2	pass 12:53		(3)
A ²	13:00 ex Portadown	2+96	13:15/13:16	50/60	(2)
A*	Empty ex Portadown	85+4+96	14:45/-		(4)
B	Empty ex Portadown	95+2+83+4+84	15:01/-		(4)
C	Empty ex Portadown	81+4+94	15:20/-		(4)
	15:00 Belfast/Dublin	112+9 Mk2	pass 15:42	160/180	(5)
C	Empty ex Portadown	81+4+94	pass 15:57		(5)
B	Empty ex Portadown	95+2+83+4+84	16:12/16:13		(5)
B	Empty ex Portadown	95+2+83+4+84	17:03/-		(5)

Table 1: Southbound movements at Scarva, 13th July 1994.

- (1) Irish Rail set, also worked 07:30 Newry/Belfast and 13:00 Dublin/Belfast (to Dundalk).
- (2) Set ran empty to Poyntzpass.
- (3) To form continuation of 13:00 ex Dublin - see (1) above.
- (4) Stabled on Up line, just south of Scarva station.
- (5) Via Down line.

Set	Service	Formation	Time	Load	Notes
	07:55 ex Dublin	074+EGV+6Mk2	09:42/09:46	75/90	(6)
	ECS to Lurgan	113+10Mk2	dep 09:55		(6)(11)
	10:00 Portadown/Bangor	2+93	dep 10:02		(6)
A	10:20 ex Poyntzpass	96+4+89	10:32/10:33	9	(6)
B	Empty ex Poyntzpass	84+4+83+2+95	10:56/10:57		
C	Empty ex Poyntzpass	94+4+81	11:11/11:11	5	
A	Empty ex Poyntzpass	96+4+89	11:30/11:31		
B	Empty ex Poyntzpass	84+4+83+2+95	pass 11:46		
C	12:05 ex Poyntzpass	94+4+81	12:13/12:13	4	
	11:00 ex Dublin	112+8Mk2	pass 12:42	150/160	
A ²	13:30 ex Poyntzpass	96+2	dep 13:37	20/30	
A ¹	13:00 ex Dublin	2+89	pass 14:53	180/200	
C	15:30 ex Scarva	94+4+81	dep 15:26	400/440	(7)
B	15:40 ex Scarva	84+4+83+2+95	15:29/15:41	600/700	(7)
A*	15:50 ex Scarva	96+4+85	dep 15:54	500/550	(7)(9)
C	16:23 ex Scarva	94+4+81	16:13/16:18	600/630	(8)(10)
B	16:35 ex Scarva	84+4+83+2+95	16:28/16:36	270/330	(8)
	15:00 ex Dublin	074+EGV+6Mk2	pass 16:50	160/170	
B	17:05 ex Scarva	84+4+83+2+95	dep 17:08	70/80	

Table 2: Northbound movements at Scarva, 13th July 1994.

- (6) Time quoted is at Portadown.
- (7) Via Up line.
- (8) Empty from Poyntzpass via Up line.
- (9) Set formed 16:55 Portadown/Bangor service thus releasing 15:30 ex Central - see (10).
- (10) Combined with 15:30 Central/Portadown and thence empty to Bangor - returned working the 18:35 Bangor/Lurgan special - 89 +2+81+4 494.
- (11) Formed 10:05 ex Lurgan. 111 followed from Bridge End to Bangor to work stock back to CSD.

Terrorist Related Incidents

Early morning cross-border services were disrupted by a security alert at Newry on 21st July which closed the station from around 06:00 until approximately 10:00. General disruption of transport in and around Belfast on the morning of 22nd July disrupted services with suspicious objects reported at

Yorkgate, Botanic and Belfast Central as well as on the track near Dunmurry station. Services had returned to normal by mid-afternoon.

Services were also disrupted between Lurgan and Moira from around 20:00 on Sunday 24th July due to suspicious object(s) on the line near Bell's Row level crossing. The following day the continuation of the 08:00 ex Belfast was formed by 112 + 8 Mk2, an 09:20 special ex Newry by 69+4+82 and the continuation of the 09:00 ex Belfast by 080 + 6 Mk2 + EGV. As there were only two NIR sets south of the blockage and the 07:55 ex Dublin had already returned on the 09:00 service there was thus no stock for the continuation of the 11:00 ex Belfast. Passengers were therefore bussed between Moira and Dublin as Irish Rail were apparently unable to muster a set and/or crew to assist. The line remained closed throughout Monday but had been cleared in time for the resumption of normal services on Tuesday morning.

Belfast Central

The repaired and revamped station entrance and ticket hall at East Bridge Street is now complete and along with the renovation of the public toilets much improves both the external and internal appearance of the station.

Locomotives And Rolling Stock

MV 106 returned to traffic towards the end of May and was initially assigned to ballast duties on the Larne line.

Brake first No.917 has been declassified and is now in use as a standard class coach.

Motor Coach No.95 re-entered traffic on 18th May following attention at York Road.

Motor coach No.98 re-entered traffic on 14th June following replacement of the power plant and repainting.

MV 104 was damaged by fire while working a ballast train from Portadown on 21st June and had to be hauled into Dundalk. It was replaced on ballast duties at Portadown by MV 106 which ran from York Road the following day.

Castle class set No.456 ran from York Road to Inchicore on 25th May for wheel turning. As these sets have no buffers, a barrier vehicle in the form of 914 was attached at CSD to facilitate recovery in the event of failure while on Irish Rail territory. The set returned north, again with 914, on 1st June.

The last suburban liveried 80 class intermediate, No.765, emerged from York Road in corporate livery on 2nd June. Motor coaches 67 and 68 together with Castle class set No.454 were being similarly repainted in early June.

A three-car 80 class set, motor coach 82, ran from Belfast Central to Inchicore on 24th June for wheel turning and was next observed working the 20:35 Belfast/Londonderry on 29th June.

Castle class DEMU 459, damaged by fire at York Road in November 1993, was returned to traffic on 14th July and is now fitted with audible door closing alarms - the first NIR vehicle to be so equipped.

Due to engineering works which made the connections at the east end of Belfast Central temporarily unusable, Hunslet locomotive No.102 was rostered as station pilot on 30th July.

Bridge Renewal

The replacement of Bridge No.366 and the removal of the nearby redundant footbridge at Crawfordsburn, No.368, resulted in the partial closure of the Bangor line on the weekend of 25th/26th

June. Services operated from Bangor to Carnalea and from Belfast to Helen's Bay with a linking bus service bridging the gap.

A new "Armco" overbridge has been installed on the former back line between Greenisland and Monkstown. Although largely lifted, the right of way is still owned by NIR and the route could be reinstated should the need arise. The bridge links separate portions of a new housing estate which is currently under development.

Weed-Spray

The Irish Rail weed-spray train toured the NIR system towards the end of June, its first visit for two years. The train returned from CSD to Dundalk on 24th June, worked by 106.

Fertiliser Traffic

GM 111 hauled a nine-bogie fertiliser train from Adelaide to Londonderry on 30th June.

Equipment Exchanges And Unusual Haulage

- 111 + 3 Mk2 worked the 07:50 Lisburn to Belfast Central on 4th and 9th May. A few days later, on 14th May, a similar formation worked the 16:15 Belfast/Lisburn, 16:45 Lisburn/Bangor, 17:50 Bangor/Dundalk and 20:10 Dundalk to Bangor (as far as Belfast Central).
- The 08:15 Bangor/Portadown and 09:55 Portadown/Central were formed by 111 and Mk2s on 5th and 6th May, on Mondays to Fridays from 13th May to 9th June inclusive, also 13th, 23rd, 28th and 29th June.

Timetable Alterations

The new NIR timetable became effective on 16th May. Apart from the Dublin/Belfast line there are no changes of note, the timetable merely incorporating the alterations made on 3rd January and reported in Volume 2, Issue 1.

The 11:20 Dublin/Belfast (weekdays) now departs at 11:00, having been temporarily altered the previous year to facilitate single line working between Newry and Dundalk. On Sundays the 15:00 ex Belfast is advanced to 14:30, is decelerated in running by 10 minutes and arrives in Dublin at 17:00. This latter change is designed to increase the margin available for onward connections and thus compensate for possible late running in the event of delays arising from engineering works. Almost all Dublin/Belfast/Dublin services have additional recovery time of between five and fifteen minutes included in their schedules. The fastest train is currently the 08:00 ex Belfast which is booked to complete the trip in two hours with one intermediate stop at Portadown. Given that trains were not particularly tightly timed in the first instance, it is not uncommon to arrive at intermediate points well ahead of the booked time and thus in practice station stops are now much extended compared with two years ago. In addition to the standard recovery allowances the schedules for the 11:00 and 13:00 ex Dublin also include additional time, on Mondays to Fridays, to compensate for planned single line working in the Newry, Poyntzpass and Portadown area.

Because of signalling restrictions arising from the relocation of York Road panel a temporary timetable was introduced on the Larne line commencing on 25th July and effective until 28th August. During this period there were no short workings to Carrickfergus and the frequency of trains between Whitehead and Larne Harbour was somewhat reduced. In contrast a near normal service was provided between Belfast and Whitehead, although there were slightly fewer trains than usual between Belfast and Carrickfergus. The table below contains a summary of the service provided:

	Monday to Friday	Saturday	Sunday
Belfast/Carrickfergus	33 (36)	21 (24)	9 (9)
Carrickfergus/Whitehead	33 (34)	21 (24)	9 (9)
Whitehead/Larne	17 (22)	17 (20)	7 (7)
Larne/Larne Harbour	17 (20)	16 (17)	7 (7)
Larne Harbour/Larne	17 (20)	15 (17)	7 (7)
Larne/Whitehead	17 (22)	16 (20)	7 (7)
Whitehead/Carrickfergus	35 (34)	20 (24)	9 (9)
Carrickfergus/Belfast	35 (37)	20 (24)	9 (9)

Belfast/Larne/Belfast: Summary of services 25/7/1994 - 28/8/1994 ()*

(*) Figures in brackets refer to frequencies effective from 16/5/1994 - 24/7/1994 inclusive.

A further temporary timetable, applicable to all other lines, but mainly affecting the Belfast to Londonderry and Portrush route was introduced with effect from 1st August. This timetable incorporates the extended running times now applicable between Belfast and Antrim via Lisburn consequent on the reduction of speed limits, which became effective on the same day. Journey times are typically increased by between 10 and 12 minutes, the fastest Belfast to Londonderry train now taking 2 hours 19 minutes. The principal alterations are detailed below:

07:10 ex Belfast (MF) to Londonderry	deferred to 07:15
11:25 ex Belfast (MF) to Londonderry	advanced to 11:15
12:55 ex Belfast (MF) to Ballymena	advanced to 12:50
13:50 ex Belfast (MF) to Londonderry	advanced to 13:40
06:20 ex Londonderry (weekdays)	advanced to 06:10 (MF), unchanged Saturdays
08:00 ex Londonderry (MF)	deferred to 08:10
08:05 ex Londonderry (SO)	deferred to 08:10
09:20 ex Portrush (SO)	deferred to 09:25
09:40 ex Londonderry (MF)	deferred to 09:50
11:30 ex Ballymena (MF)	advanced to 11:25
11:05 ex Londonderry (SO)	deferred to 11:10
11:55 ex Londonderry (MF)	advanced to 11:30
13:40 ex Portrush (SO)	advanced to 13:30 to 3/9/1994
14:33 ex Ballymena (SO)	advanced to 14:23 from 10/9/1994
16:02 ex Crumlin (MF)	deferred to 16:04 does not serve Glenavy or Ballinderry
17:07 ex Ballymena (SO)	advanced to 17:00
17:00 ex Londonderry (weekdays)	deferred to 17:05 (MF) and 17:10 (SO)
19:00 ex Londonderry (weekdays)	deferred to 19:05 (MF) and 19:10 (SO)
18:30 ex Portrush (Sundays)	deferred to 18:35

Miscellaneous

- NIR re-introduced their popular £3 "Go as you please ticket" in June. Valid for a full day's unlimited travel within Northern Ireland the ticket is available on Saturdays and Sundays only. The corresponding fare for children is £2 and is subject to the same conditions. This facility had been withdrawn again by early September.
- A new ticket office has been provided at Carrickfergus station. In addition the waiting room on the Up platform has been redecorated and re-furbished.

- The overall speed limit on the Lisburn/Antrim branch was reduced from 70 to 50 mph with effect from 1st August. Likewise new 30 mph boards are in place on the approach to Ballinderry station. The existing speed limits at Glenavy (40 mph) and Crumlin (30 mph) have not been altered.
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Private Railways and Museums

Bord Na Mona

Following on from the success of the Clonmacnoise and West Offaly Railway a second tourist oriented service has been established, this time at Bellacorick in Co. Mayo. It is marketed as the “Bellacorick Bog Train” and was advertised to run from 11th July to 19th August inclusive. Departure times from the Bord Na Mona office at Bellacorick (N59) were at 10:30, 12:00 and 15:00 daily. It is understood that a locomotive-hauled former West Clare Railcar was used for passenger accommodation. The train can accommodate forty-five passengers and the trip in the midst of the spectacular scenery of the Nephin mountains takes about an hour and fifteen minutes, affording an opportunity to see Ireland’s first wind farm and to view the blanket bog together with its flora and fauna. By all accounts the season was a success, so much so that the 15:00 service was completely full on a number of occasions. It is understood that the train will run again in 1995 and that the season will be extended.

Ballynahinch & County Down Railway

Forty-four years after the closure of the Belfast & County Down mainline to Newcastle as well as the Ballynahinch and Donaghadee branches, a new company has been formed with the above title and has as its objective the re-opening of both the Belfast/Newcastle section and the Ballynahinch branch. The core element of the plan is centred on the Ballynahinch branch where an international freight terminal would be established. All lines would be of 1,435mm gauge, rather than 1,600mm, and freight would be conveyed to Britain via roll-on, roll-off, rail-based ferries either for local delivery or onward conveyance to the continent via the Channel tunnel.

Commuter services would be provided to East Belfast, Comber, Ballynahinch, Downpatrick and Newcastle with consideration also being given to the re-instatement of the Donaghadee branch as far as Newtownards. The cost of the project is put at £200m, of which some £50m would come from the private sector, the remainder coming from the Northern Ireland allocation of EU structural funds. The plans have been lodged with the Northern Ireland Office and the local Department of Transport has agreed to seek the £150,000 required for a comprehensive feasibility study.

South Donegal Railway Restoration Society

Following various difficulties, not least of which is the proposed routing of the Ballybofey bypass, the SDRRS has now abandoned plans to restore some nine miles of the original CDR route through the Barnesmore Gap. It is reported that the society is looking at several alternative schemes involving restoration of part of the Donegal to Ballyshannon branch. Negotiations were in hand with CIÉ at the end of June with a view to acquiring the former stationmaster’s house in Donegal town for use as an office and permanent exhibition centre.

Cavan & Leitrim Railway, Dromod

10th July saw the delivery to Ireland of an 0-4-2T Kerr Stuart locomotive which was transported by

low-loader from Alan Keef Ltd, Ross-on-Wye, and which arrived at Dun Laoghaire on board the 17:30 "Stena Cambria" sailing ex Holyhead. The loco, which dates from 1916, originated on the Lochaber Water Power Scheme in Scotland. By the time of its purchase by the Irish Narrow Gauge Trust in 1988 little remained save the frames and wheels. As it stands today it is virtually a new locomotive - new boiler, smokebox, cab, cowcatchers, etc. A Polish Westinghouse pump provides air braking and this is applied using equipment saved from a Ruston diesel formerly used by CSÉ at the now closed Thurles factory. Successful steam trials took place at Dromod on 13th and 14th July. Meanwhile a new three-road wagon shed has been completed and work is due to start shortly on a 1,000 sq ft exhibition centre.

During May the old Cavan & Leitrim station at Mohill was purchased by the local community for use as a heritage centre and will be available as the terminus of the line from Dromod should restoration eventually reach this point.

Some 1,200 used sleepers have been acquired from Irish Rail at Portlaoise and cut to a size appropriate to 3ft gauge track. In addition some 50 lb/yard ex-West Clare rail has been purchased from Bord na Mona and used in track laying operations which commenced on 21st May.



Cavan & Leitrim Railway No.1 "Dromod" at Dromod, July 1994.

Downpatrick & Ardglass Railway

The re-instatement of the south-western arm of the former Belfast & County Down main line from the "Loop" platforms at Downpatrick towards Dundrum is progressing, with track now in place to a new platform located at the former junction for Ardglass. Trains from the town station at Downpatrick are hauled to the new terminus in both directions, an arrangement necessitating a locomotive at both ends, generally the 0-4-0 Saddle Tank No.3BG leading with one of the E-class shunters, E421 or E432, at the rear.

Isle of Man Railways

Ex-CDRJC railcars Nos. 19 and 20 made a rare trip on 28th July when they formed a special working from Douglas to Port Soderick as part of the Isle of Man Railways 1994 Summer Spectacular.

ITG

G617, a 160 hp chain driven 4-wheel shunting locomotive, was started for the first time in eight years at the ITG's base in Carrick on Suir on 29th May and moved up and down a short stretch of track on 4th June hauling 226 and G616. The locomotive thus becomes the first working unit in the ITG collection. While restoration of 226 and G616 is in hand the other locomotives on the site, B103 and 231, have in effect been secured in storage and are not candidates for restoration in the short term.

“Freight on the Move”

Bord Na Mona

One of the most extensive industrial railway systems in these islands comprise the various networks of mainly 3 ft gauge bog railways operated by Bord Na Mona for the transport of peat, primarily to the adjoining power stations run by the ESB (Electricity Supply Board). At present, about five million tonnes of peat are transported annually over a total network of 1,200km, of which 350km is temporary track - the latter laid and lifted as harvesting of the bog progresses.

Bord Na Mona was established in 1946. It now has bogs at about twenty locations in Ireland, the main activity being in the Midlands but there are also bogs at Littleton (Co. Tipperary), Barna, Carrigcannon (Co. Kerry), Attymon and Derryfadda (Co. Galway), Oweninny (Co. Mayo), Easkey (Co. Sligo) and Glenties (Co. Donegal). This article will concentrate on two of the Midland systems namely those at Boora and Blackwater.

In the last issue we briefly mentioned the excellent circular trip on the Clonmacnoise & West Offaly Railway which is part of the Blackwater system. This 96 mile system stretches from near Belmont in Co. Offaly to within a few miles of Ballinasloe in Co. Galway. Production fields extend from about two miles south of Athlone almost down as far as Banagher and yield over one million tonnes of milled peat per year most of which is supplied to the ESB for their 125 MW power station at Shannonbridge, the largest peat burning station in Ireland. A fine pre-stressed concrete bridge, 160 metres in length, crosses the Shannon adjacent to the power station and consists of six 24 metre spans and one of 13.7 metres. This latter crosses the navigable channel and provides a clearance for river traffic of 4 metres at high water level. Having crossed the Shannon the line joins a section of track running north-west to south-east along the banks of the former Ballinasloe branch of the Grand Canal, between Fanning's lock and Lismanny bridge.

East of the Blackwater network, but not physically connected to it, is the Boora system and workshops which serve the ESB power station at Ferbane and the Derrinlough briquette factory. The production fields in this instance are in an area bounded by the towns of Rahan, Kilcormac, Cloghan, Ferbane and Ballycumber. The density of railway in the area is clearly evident on the road from Blue Ball to Cloghan where three level crossings and one underbridge are encountered in the ten mile distance between these two places.

The allocation of locomotives to the above two systems is as follows:

Loco Type	Blackwater	Boora
Wagonmaster type	33	25
Ruston 48 DL	3	12
Ruston 40 DL	3	2
Deutz	5	11
Gleismac	10	3
Simplex	0	1
TOTALS	54	54

The numerically dominant Wagonmaster was designed by a team of Bord Na Mona engineers and a prototype constructed during 1961 at the Derrygreenagh workshops. Hunslet of Leeds received an order for 25 locomotives of this type in 1962 and by 1981 the fleet had expanded to 128 units, each of 80 hp. Between 1984 and 1986 fifteen further locomotives, this time rated at 115 hp, were delivered and are numbered LM374 to LM388 inclusive. These later machines incorporate major design changes including: 1) transmission via a direct drive to axle mounted gear boxes; 2) rubber chevron suspension; 3) pneumatically powered disc brakes operating on the transmission drive. In 1993 a program was put in place to rebuild approximately ten of the older Wagonmaster locomotives each year. The rebuilds are being undertaken by Bord Na Mona staff and will incorporate the features mentioned above.

Rail is generally of 30 to 35 lb/yard in weight and is mounted on steel sleepers which are two metres long and spaced 840mm apart. The rail is fixed to the sleepers using steel clips and clip bolts. A Bord na Mona designed and built track laying machine is capable of manipulating track panels in lengths of approximately 10 metres. Panels containing turnouts are of similar length and can thus be easily manipulated by the same machinery. Construction of a bog railway requires good drainage and a well prepared track bed. The latter typically consists of a layer of dry milled peat some 600mm to 900mm deep which is consolidated before track laying commences. Permanent track is then ballasted, preferably with 225mm of sand, fine gravel or crushed stone.

A milled peat train generally consists of a single locomotive hauling 14 wagons and weighing about 110 tonnes. Sand is applied liberally to improve adhesion. Given the relatively low operating speeds, signalling is almost non-existent and crossing of trains on single line sections is normally arranged by radio. Public road level crossings are unmanned and as a consequence are often protected by trap points to guard against runaway wagons or the possibility that an approaching train might not be able to stop. As can be deduced from the tonnage carried and the weight of a typical train there are many movements each day throughout the system, so much so that five or six trains might be observed converging on a location like Shannonbridge at any one time.

IRISH RAIL MAINLINE TIMETABLE REVIEW

The current timetable came into effect on 16th May 1994, and will be valid until 6th November 1994. Once again there are no major changes on any routes, the majority of alterations being to accommodate Arrow services between Heuston and Kildare.

Dublin / Belfast: The weekday 11:20 Dublin/Belfast returns to its traditional 11:00 slot and is no longer advertised to serve Mosney. On Sundays the 15:00 ex Belfast is advanced to 14:30 and decelerated by 7 minutes thus arriving in Dublin at 17:00. Despite the attendant overcrowding and the generally

unsatisfactory experience of previous years, all Sunday services called at Mosney from 15th May to 4th September inclusive, except the 17:55 Dublin to Belfast which re-commenced on 4th September and, as previously, runs non-stop to Newry.

Dublin / Cork: The 20:30 Heuston - Cork is deferred to 21:00 (its former time) - however this change was actually implemented from 31st January. There is now a 10:20 Fridays only to Cork, returning at 13:45 from Cork, serving Limerick Junction and Mallow, and Mallow and Thurles en route respectively. The 18:30 Heuston Tralee is advanced to 18:15, giving a Cork arrival time of 20:55 (20 minutes earlier), following a change of trains in Mallow. The 08:20 Saturday-only Heuston - Cork is advanced to 08:15, with no overall change in timing. The 19:00 Cork - Heuston now operates in the same path each weekday (previously a slightly different path on Saturdays). On Sundays the 18:30 non-stop service to Cork is advanced to 17:50, while the 21:15 is retimed to 21:30, and is accelerated by 50 minutes to give a 3 hour 15 minute journey time (this change is due to the cessation of TPO traffic). Ex Cork on Sundays the 09:00 to Heuston is retimed to 09:10 and operates non-stop from Thurles, arriving in Heuston at 11:50 - this has been possible due to the introduction of a 10:05 Limerick - Heuston (see below). The 14:30 is advanced to 14:15, no longer serves Thurles and arrives in Heuston at 16:45, an acceleration of 5 minutes. A new 14:30 Cork - Heuston has been introduced, serving Mallow, Charleville, Limerick Junction and Thurles, arriving in Heuston at 17:20. This train then returns as a new 18:55 Heuston - Cork, with the same stops (except Charleville), arriving at 23:40. Finally the 18:30 to Heuston is accelerated by 5 minutes to arrive at 21:45. Overall there are welcome additions on Fridays and Sundays, however the introduction of the Arrow service causes delay to many services, particularly where an Arrow is running out of path.

Dublin / Limerick & Ennis: There is now a service to and from Ennis every day, with the extension of the 15:22 Limerick Junction on Sundays, and the operation of the existing trains each weekday. The 17:40 Heuston to Limerick and Ennis is advanced to 17:35 but is otherwise unaltered. The 17:45 Heuston - Limerick is advanced to 17:40, and operates non-stop to Portlaoise, and arrives in Limerick at 20:50, following a 41 minute layover in Limerick Junction (to provide a Limerick connection out of the 19:00 Cork- Heuston). On Sundays new through services are introduced. These consist of a 10:05 ex Limerick serving all stations Thurles to Kildare and arriving at 12:35, and a 13:40 ex Heuston (which operates via Limerick Junction station but does not service Newbridge or Ballybroy) arriving in Limerick at 16:21. The 17:15 ex Ennis (18:10 ex Limerick) is deferred by 5 minutes, but retains its previous arrival time of 20:45. The 18:40 Heuston - Limerick is advanced to 18:30, and is accelerated by 5 minutes to arrive at 20:55. Overall services to/from Limerick are improved, with Cravens now being the minimum level of carriage being provided with a three-piece push/pull set on many of the Limerick - Limerick Junction services.

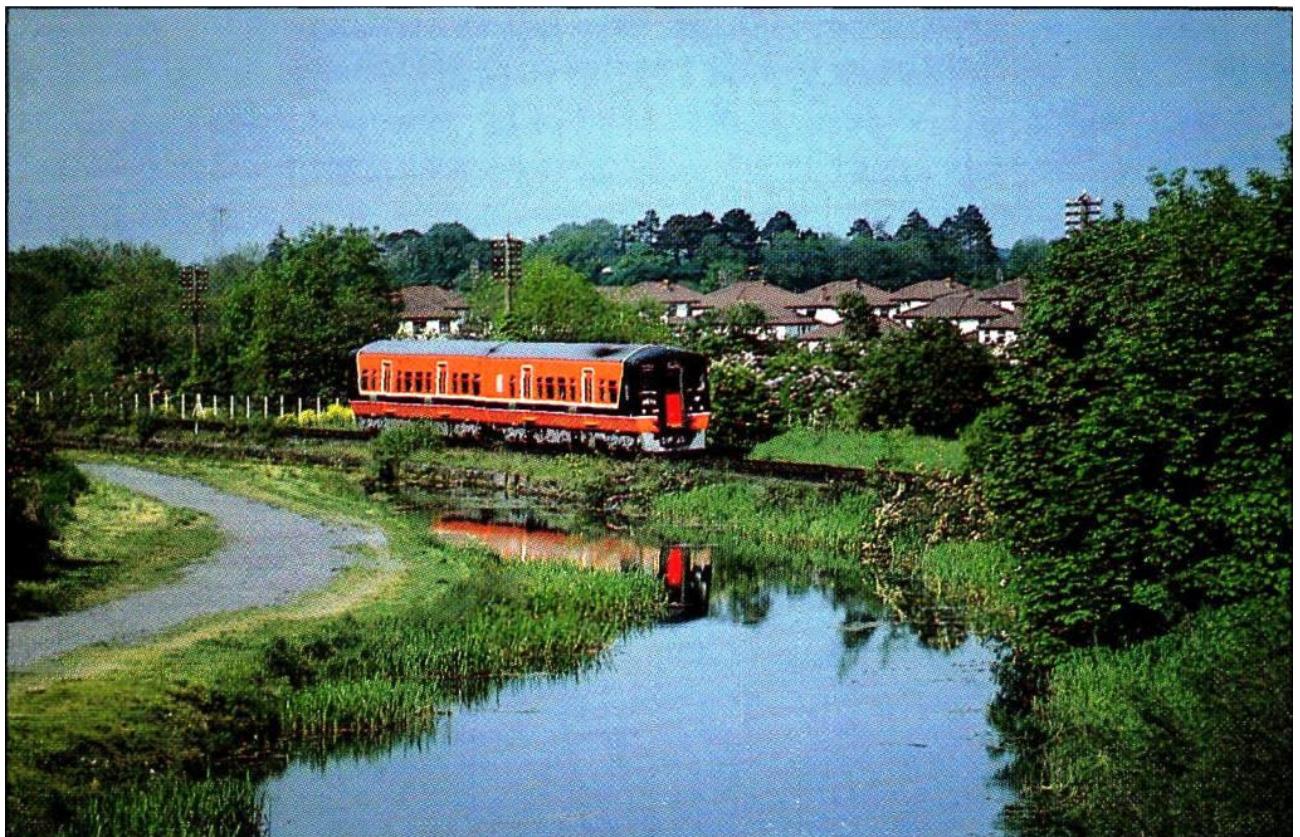
Dublin / Limerick (via Nenagh): A spartan service continues to be provided, with no major changes. On weekdays the 10:20 ex Ballybroy is now 4 minutes faster, while the 19:10 is advanced to 18:55 with no change in journey time on the branch. Ex Limerick the 15:40 is deferred 5 minutes, again with no change in journey time. On Sundays the 20:00 ex Ballybroy is advanced to 19:45 and is accelerated by 9 minutes to give an overall timing on the branch of 81 minutes. The 17:50 ex Limerick is deferred to 18:00, and while there is no acceleration on the branch, Heuston continues to be reached (by way of the 18:10 ex Limerick) at 20:45.

Dublin / Tralee: There are relatively minor changes on weekdays, the main alteration being the advancement of the evening train ex Heuston to 18:15, and its deceleration by 5 minutes to Mallow (caused by poor pathing behind the 18:10 Heuston - Waterford). The Friday-only 17:45 ex Heuston is advanced to 17:40, operates non-stop to Portlaoise and arrives in Tralee at 21:45. The 14:20 Tralee - Heuston now calls additionally at Templemore, resulting in a 5 minute deceleration. On Sundays a 17:00 relief ex Killarney operates from 2nd October, serving all stations to Mallow, then calling at

Thurles only, to arrive in Heuston at 20:15. The 17:05 Tralee - Heuston is deferred to 17:10 with the same 3 hour 15 minute journey time.

Dublin / Waterford: The only changes on this line concern trains now formed by 2600 class Arrow railcars. The 17:15 Fridays only ex Heuston is advanced to 17:05, serves all stations to Waterford (including the suburban stops) and is 5 minutes slower overall (mainly due to an extended crossing of 19 minutes in Kilkenny). The 06:00 Mondays only ex Waterford was initially advanced to 05:55, subsequently further advanced to 05:40 on and from 13th June, serves all stations including suburban stops, to arrive in Heuston at 08:15, subsequently changed to 08:10 when the 05:40 change was made. On Sundays the 09:50 ex Heuston is accelerated by 10 minutes, as is the 14:35 ex Waterford, which is deferred to 14:45, retaining its previous Heuston arrival time of 17:20.

Dublin / Westport & Ballina: The only changes here are the acceleration of the 17:00 Friday-only Heuston - Ballina by 10 minutes, and the acceleration of the 18:05 Heuston - Westport by 5 minutes. As a result of the latter change the 21:22 Manulla - Ballina is advanced to 21:15, but is decelerated by 2 minutes to arrive in Ballina at 21:50.

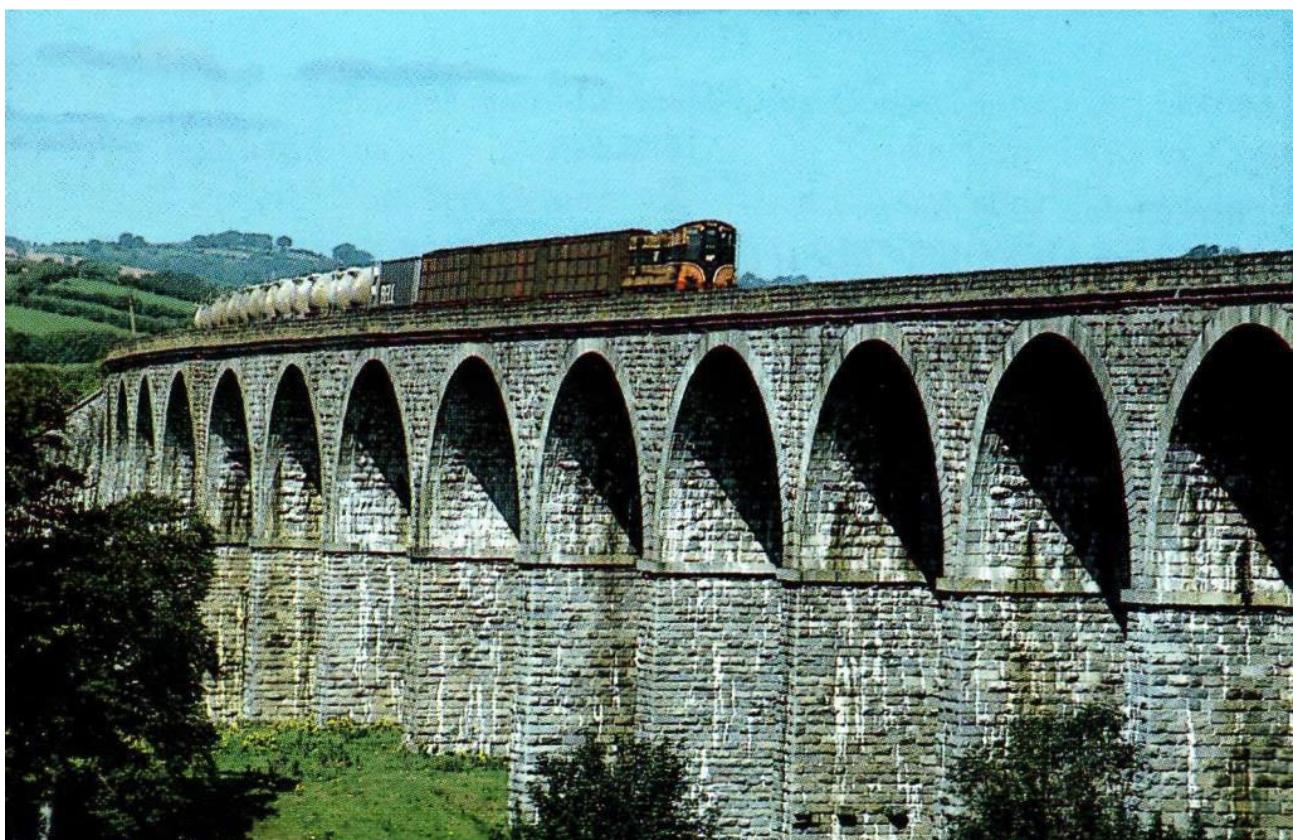


16:10 Connolly/Maynooth approaches Leixlip on 28th May.

Dublin / Galway: With TPO traffic no longer being conveyed some modest accelerations have been made. The 07:55 ex Heuston is deferred to 08:00 and is accelerated by 10 minutes to give a Galway arrival time of 11:00. The 17:00 Heuston - Athlone now serves the suburban stations Mondays to Thursdays and is formed by 2600 railcars on these days and arrives in Athlone at 18:39, subsequently changed to 18:45 on and from 8th June. The 05:30 Mondays only Galway - Heuston was deferred to 05:35, subsequently changed back to 05:30 on and from 13th June, and serves all stations including the suburban stops to Heuston. The 06:40 Tuesdays to Fridays Athlone - Heuston was similarly initially deferred to 06:45 only to be advanced to 06:38 on and from 8th June. The 15:10 Galway - Heuston is

deferred to 15:15, and arrives in Heuston at 18:10, an acceleration of 10 minutes. The only change on Sundays is the 20:10 Heuston - Galway which is deferred to 20:20, however with TPO traffic no longer handled, Galway is reached at 23:05 (previously 23:30). First class accommodation is introduced on the 08:00 and 14:10 ex Heuston, and the 11:35 and 18:05 ex Galway. Overall timings on this line remain poor, and changes such as those mentioned above, after the timetable had been introduced, have not improved matters.

Dublin / Sligo: Accelerations apply to most trains, with the 08:40, 13:25, 17:05 FO, and 18:30 ex Connolly being 10, 8, 4 and 7 minutes faster respectively. In the other direction the 07:45 becomes the 07:50, arriving in Connolly at 11:00, an acceleration of 10 minutes, the 13:30 is advanced to 13:25, arriving at 16:35, and the 17:40 now arrives at 20:50, the acceleration of 10 minutes. On Sundays the 09:00, 13:40 and 18:15 ex Connolly are 10, 6 and 10 minutes faster respectively. A new 15:45 Sunday Connolly - Longford operates from 2nd October, returning at 18:45, and arriving in Connolly at 20:35. Both of these trains serve Maynooth, Mullingar and Mostrim. Overall the gradual improvement of Sligo line timings continue.



11:35 ex Belfast, hauled by 121, crosses the Craigmore Viaduct on 30/8/1993.

Dublin / Rosslare: Minor changes apply to the 18:30 ex Connolly from 3rd October, which see it arrive in Rosslare 6 minutes earlier at 21:23. On Sundays the 18:30 ex Connolly is accelerated by 10 minutes from 2nd October to arrive in Rosslare at 21:20. Also on Sundays the 09:15 ex Rosslare now arrives four minutes earlier into Connolly at 12:16. The changes from the start of October mentioned above are in consequence of 071 class haulage from that date. However no accelerations apply in the Up direction to Connolly!

Limerick / Rosslare: The summer service is slightly extended in duration this year, operating from 20th June to 10th September (28th to 4th last year). Timings are very slightly altered with the 10:30 summer

service to Rosslare arriving 5 minutes earlier at 13:45. The 17:00 Waterford to Rosslare arrives 3 minutes earlier at 18:17, and the 16:00 ex Limerick now leaves at 15:55, leaves Limerick Junction 5 minutes later at 16:45 and still arrives in Rosslare at 19:30. In the other direction the 15:15 summer-only Rosslare to Waterford arrives 4 minutes earlier at 16:13, and the 19:40 Rosslare - Limerick is later departing Limerick Junction awaiting the 21:00 ex Heuston (previously this train was 20:30) and now arrives in Limerick 25 minutes later at 23:32. The Sunday-only bus service between Waterford and Limerick is no longer shown. Overall a rather poor service continues to be provided. However, Cravens shock is now standard on all services.

Cork / Cobh: The only change here is that the 14:20 ex Cork and its return from Cobh at 14:55 (both Fridays excepted) now operate year round.

- A welcome feature this year is the posting of a customised timetable at each station throughout the system with details of services calling at that station presented in a standardised format which is easily read and interpreted. Unfortunately in the case of suburban stations these displays are generally located exclusively in the circulation area near the booking office and are therefore of little use when the station is unmanned, as the booking office environs are generally closed to the public at such times.
- The established practice of cancelling Sunday afternoon services on the Sligo, Waterford and Galway routes on Bank Holiday weekends appears to have ceased as these trains ran on both 5th June and 31st July.