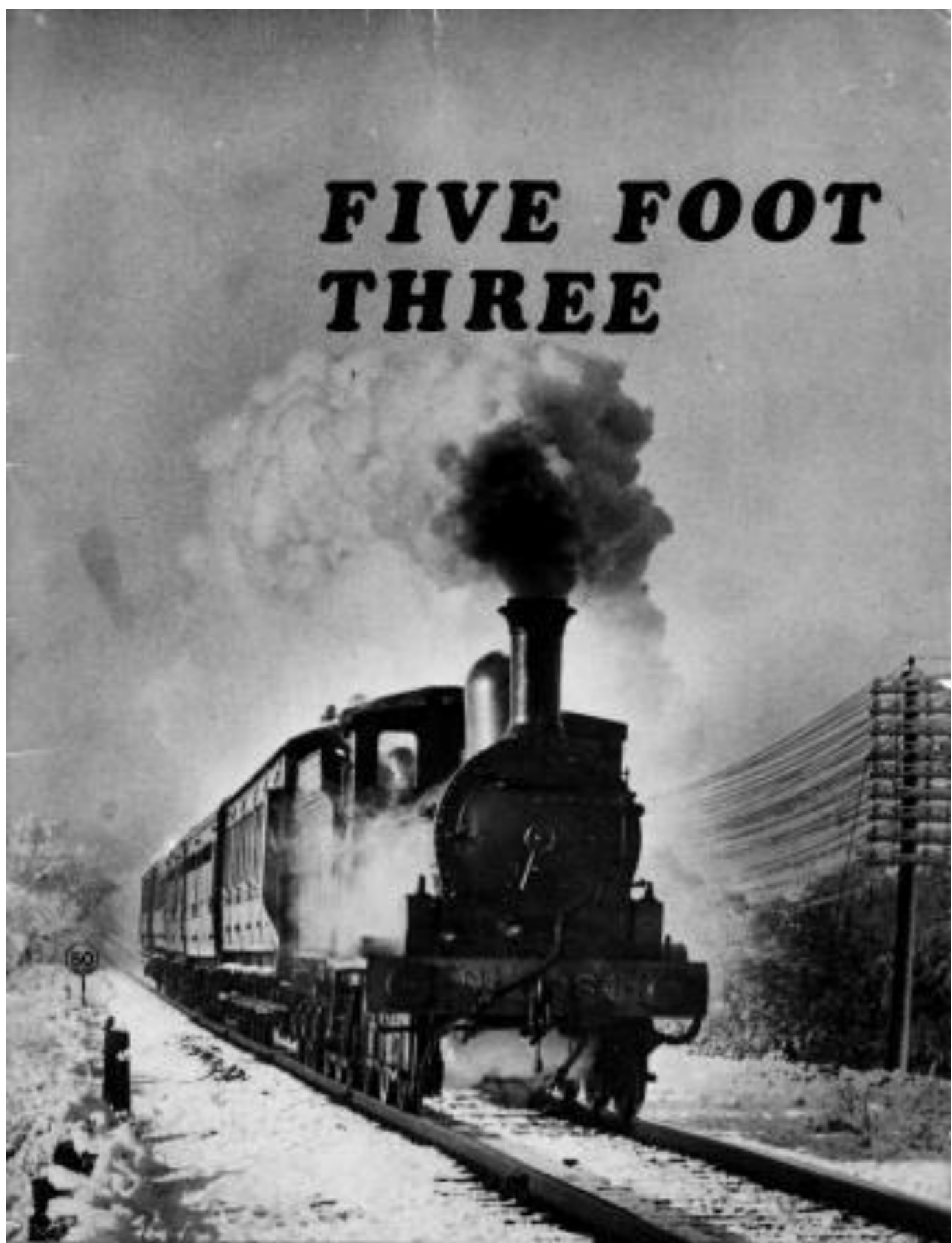


FIVE FOOT THREE



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Editor: Alan Edgar

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Opinions expressed by contributors do not necessarily represent those of the Editor or the Council of the Society.

Front Cover: No.184 approaches 46th Mile Box en route to Killucan during the 1981 "Santa" trains. (C.P. Friel)

EDITORIAL

Which is the most important part of a steam locomotive? Perhaps it is the boiler. But then a locomotive wouldn't get very far without wheels. And we would require some frames on which to mount these components. Not to mention a tender in which to carry coal and water. We can now produce ample steam, and carry enough fuel for a long journey. We still won't move off the drawing board, however, as there is no way of translating the power produced in the boiler into movement. So add cylinders, and motion of - whatever type you fancy. But now where are the crew going to sit?

The above discussion could be continued to great length and in the end we would conclude that the small nut which fixes the oil pipe to one of the axleboxes, for instance, has just as important a role to play as the boiler; without it the locomotive would not function correctly. No locomotive is a haphazard collection of components. They are all interdependent, and must be regarded as a whole.

This rhetorical locomotive is our Society. From time to time groups within it jostle as to **their** importance to the operation.

The Society was formed around steam locomotives, so the Locomotive Department seems to have a fairly strong claim. The Carriage squad could reply that without their coaches there could be no

passengers, while the Site gang would point out the difficulty of having a train and nowhere to put it. Then there is the Sales Department which provides the financial lifeline.

Less obvious, perhaps, is that the Society would collapse utterly if no one was prepared to do Membership Secretary, or if no 'stuffers' - that unsung group of people - who put this magazine, and 600 like it, into envelopes, came forward. These are merely two of a multitude of tasks which most members, including myself, tend to take for granted. Like the locomotive, the Society will not function as a random collection of sub-groups, each with their own interest to the exclusion of all else. It will only succeed as a team of people working in conjunction with each other, understanding the needs and direction of other parts of the Society, and compromising accordingly.



No.184 works the first "Santa" train of 1981 to Multyfarnham, seen here approaching Culleenmore Gates about 2 miles north of Mullingar. (C.P. Friel)

NEWS FROM COUNCIL

Robin Morton

Finance, or rather the shortage of it, has been a perpetual backdrop to Council thinking during the year. Despite financial stringency the year's railtour programme was maintained due to the efforts of the Society volunteers at Whitehead and Mullingar.

Meanwhile the Society's financial wheels were kept turning through the work of the Society's fundraising department, Irish Steam Scene.

However, it should also be recorded that the trend of diminishing returns on the Society's railtour operations has at last been reversed, following useful meetings with the railway companies.

While we will never return to the days when railtours made enough to meet the fixed overheads of the Society, our outings are at least starting to cover their basic operating costs.

Built into each railtour costing which comes before Council for fare fixing and approval is the 'RPSI Mileage Charge' which represents an attempt to offset some of the maintenance charges and fixed costs, the most noticeable of which is the insurance bill.

Based on the average RPSI railtour mileage per year, it is estimated any trip would have to be contributing no less than £6 per mile to such overheads if we were to end up with a clean sheet.

The Council was pleased to oversee another successful year of railtours and our determination to fix the provisional programme for 1983 in time to catch the various calendars of coming events has proved worthwhile.

A notable innovation during the year was the Schools' Day at Whitehead, which actually spread into two days, and attracted more than 1,000 children for a train ride, audio-visual display, and guided tour.



Spot the Secretary Competition: Robin Morton enlightens some of our younger visitors during the Schools' Day. (C.P. Friel)

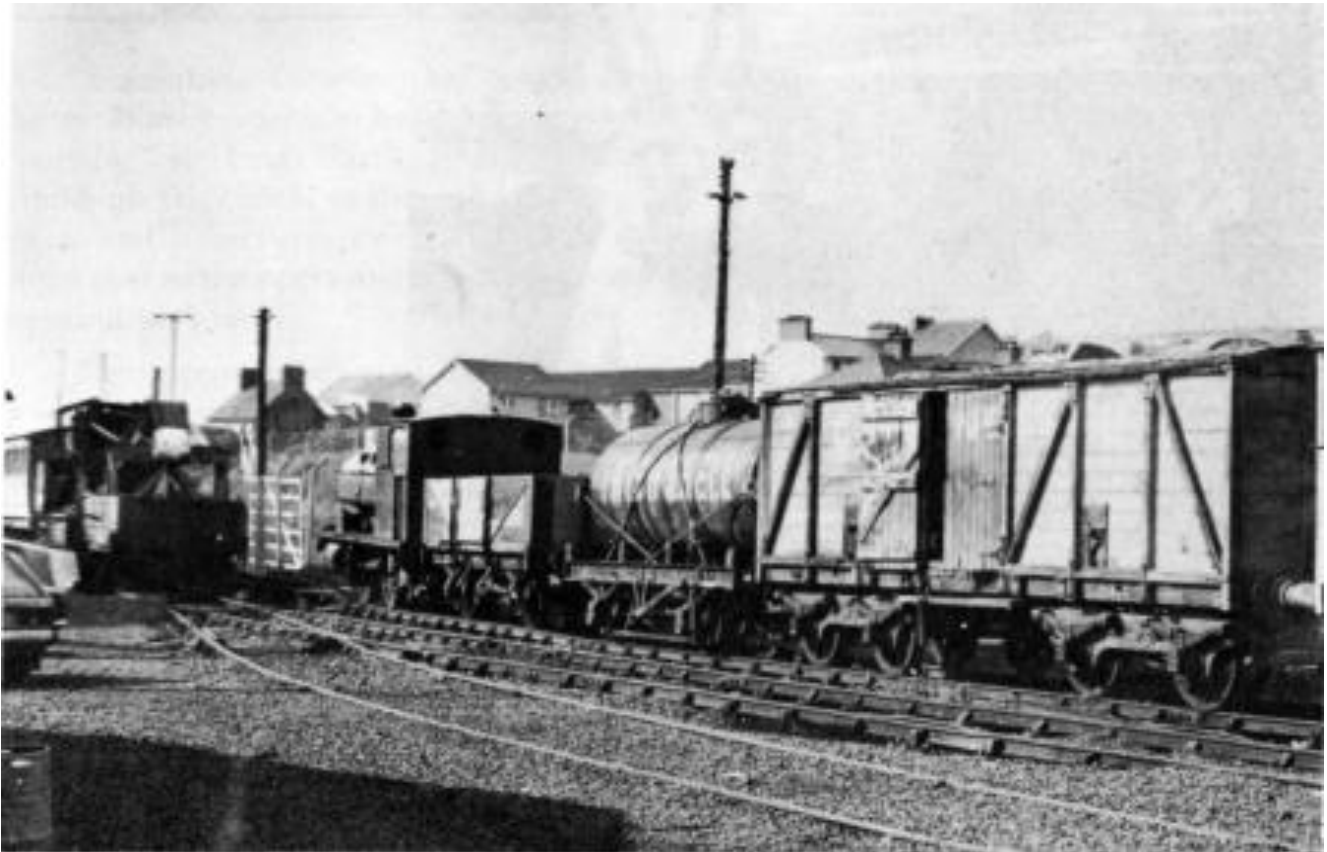
Also new in 1982 were the "Easter Bunny" specials, held at Mullingar, which certainly caught the public imagination. Like "Santa" trains, "Easter Bunny" specials now look like becoming part and parcel of our year's programme.

The Council has for the second time decided to base a rake of five running carriages at Mullingar over the winter period, to allow operations with No.184 to take place.

However, the Council is concerned about the steadily rising overheads of this operation, which now

include high carriage inspection and haulage charges imposed by CIÉ. A radical rethink on this policy may be necessary in Autumn 1983, because so much income is being eaten up this way.

It was largely the difficulties involved in long-range administration that made the Council decide, albeit reluctantly, to shelve the Mallow proposal. The idea had been that the Society would take over a shed at Mallow and set up a third base there at which carriage renovation would take place. But with the administrative weight of running the Society falling on fewer and fewer shoulders, the Council felt such an expansion at this stage would be ill-advised.



The 'Goods Train' consisting of the Guinness locomotive and several wagons formed one of the exhibits on the Schools' Day. (C.P. Friel)

On the coach front, the Council has been pleased to witness the success story of the Action for Community Employment (ACE) scheme at Whitehead. The scheme started at Whitehead in September 1981 with three employees being taken on, the Society paying 10% of their wages and the Government the other 90%. Sadly the scheme prohibits workers staying on after 12 months and so we have had to bid farewell to the first batch. But in September 1982 we took on a further three employees, a welder and two joiners, and they are continuing to make a tremendous impact on the rate of progress at Whitehead, both on locomotives and coaches. Another new scheme expected to start in early 1983 is one being run by the Northern Ireland Association for the Care and Resettlement of Offenders (NIACRO). Ultimately this could involve 22 trainees and four supervisors whose job would be to renovate carriages and wagons. There is no outlay on wages for the Society in this scheme, but the RPSI will have to provide materials.

A useful and unexpected boost to finances came in September when No.171 was hired for use in the shooting in Dublin of a film about Richard Wagner. The movie stars Richard Burton and Gemma Craven, and No.171 was stationed at Dublin Heuston for the filming sequence.

A project the Society hopes to expedite in 1983 is the installation of the former Londonderry turntable at Coleraine, to facilitate use of tender engines on the "Portrush Flyer". This year the Flyer was only saved from cancellation by the agreement of the NIR crew to run tender-first with No.171 in one direction on the Flyer, and clearly the sooner the table can be put in the better.

As already circulated to the members, the Society held an EGM in September to decide the future of the Banbridge Junction branchline scheme. A motion was passed agreeing to the formation of a limited liability company to "construct and operate" the Scarva-Banbridge branchline, with the proviso that the company is responsible for raising all its own funds. At the time of writing, plans are in hand for meetings with lawyers to prepare draft articles of association, while a meeting with The Northern Ireland Tourist Board has revealed that grant aid of 40% will be available retrospectively for the setting up of a pilot scheme at Laurencetown.

To end where I started, on finance, members will be pleased to note that the EGM also decided to peg the subscription at £6 per annum for 1983 instead of implementing an increase to £7.

OPERATIONS 1982

Ernie Gilmore

"Something for everyone" could describe RPSI operations in 1982. "Santa" and "Easter Bunny" specials have supplemented the enthusiasts' two-day tour and the 'popular' workings north and south, that is, the "Portrush Flyer", "Steam Enterprise" and "Claddagh" trips. Add to these the Sunday train rides, Whitehead Steam Gala, Schools' Days, and it becomes evident that the 'close' season from October to March is as important as the operating season in revitalising locomotives and rolling stock - not to mention personnel.

The opportunities to restore and preserve locomotives and rolling stock have never been greater since the birth of the RPSI and are limited only by manpower and finance. These topics are dealt with elsewhere in this magazine, suffice to say that the temptation to top up the coffers at Christmas has proved irresistible and the remarkably popular "Santa" train rides will once again punctuate the restoration at Mullingar and Whitehead. In 1981, 1,600 people turned up at Mullingar in the middle of the worst period of snow and frost for years just to experience a short ride on the train, receive a gift from Santa and a glass of punch for those with suitable age qualifications. John Richardson's idea is a good one and we wish him well as he extends the operation this Christmas to include Athlone.

Recollection of the year's activities must include the "Claddagh" railtour, our first trip of the season from Mullingar to Galway and back, with an afternoon visit to Attymon Junction to liaise with the West of Ireland Steam Railway Association, who hope to reopen the branch line to Loughrea.

Saturday 17th April was memorable for the fact that CIÉ was in the middle of an industrial dispute which cancelled a large proportion of their trains due to a lack of drivers. It was more surprising therefore that so many made the trip, the Dublin party having to be re-routed at the last minute by Sam Carse to travel on a Dublin-Galway train, joining the RPSI special at Athlone. I don't know how they got home again to Dublin.

I do know that apologies were made to a group of over 40 scouts from Tullamore who travelled with us from Mullingar and who arrived in Galway over an hour late due to a signalling mix-up in Ballinasloe, whereby we found ourselves shunted into a siding to allow a service train to overtake us, instead of pounding our way towards lunch in Galway. No.184 acquitted herself well, however, as always, and put in some smart running to ease the pangs and placate the timers. The railtour was pronounced a success, bearing in mind the difficulties and uncertainties under which it operated. Receipts covered expenses, but not the operating cost.

Before reporting on the two-day "Thomond" railtour, I shall digress to define 'railtour expenses' and 'operating cost'. Railtour expenses include the charges by the railway companies for the operation of

the railtour, the cost of coal and oil used, and advertising and promotional costs. Operating cost includes, in addition to the above expenses, a mileage cost, at present standing at £6 per operating mile, to cover locomotive and carriage running repair costs (**not** restoration costs) and the obligatory operating insurance. Thus, if the Society is to remain viable at its present level of activity, the true operating cost of each trip must be **at least** covered by the revenue from fares, and on-board profits from the shop and dining car.



Shades of King Kong: No.184 hijacked by giant rabbit. Actually, it's the Easter Bunny taking a pause from distributing Easter eggs at Mullingar last Easter. (C.P. Friel)

It was with this policy in mind that we approached the two-day "Thomond" railtour. By the closing date for bookings we had not enough to cover the railtour expenses, let alone the operating cost. At the last minute CIÉ were persuaded to lower their charges and only this ensured the running of the event.

On the Saturday, in spite of the usual early hitch, we reached Portarlinton in time for a top-up for No.171, using a fire hydrant at the end of the Down platform. Athlone was reached with the carriage water tanks requiring as much refreshment as the passengers, but not before a signal failure had caused a lengthy delay at Clonnydonnin.

Water for the passengers en route is proving every bit as difficult to organise as locomotive water, and runs a close second in importance. Days had been spent by the Loco Running and Carriage Running Departments of the Society going over the route carefully and assessing the water availability (and quality). The two requirements based on different criteria, just to make things a little more complicated. Locomotives require water at regular intervals based on mileage, with a secondary function of difficulty of route. Carriages require water at intervals based on passage of time with a secondary function of bar income!



No.184 passes through Attymon Junction on the return working of the “Claddagh”. Hopefully no one had their washing out. (C.P. Friel)

The great debate within the Operations Committee was brought to a conclusion only three weeks before the “Thomond” tour date. In the end it was the usual compromise - loco No.171 was detached at Athlone instead of double-heading through to Athenry. No.184 had already proved her capabilities on the Woodlawn bank, when she hauled the “Claddagh” train up in fine style; a similar load was to be on the “Thomond”. This compromise allowed the crew of No.171 a shorter route for her obligatory journey to Limerick via Thurles and Limerick Junction. We had made an application to have her work through light engine from Athenry to Limerick, but the axle load was too much for the Permanent Way Department of CIÉ, and she had to take the long route to rendezvous in Limerick.

Thus the tour proceeded to Athenry in charge of No.184 and, after detaching and running over to the Up road for loco water, the waiting lineside bus was despatched to a road overbridge three miles down the Waterford-Limerick main line. Forty people were amply rewarded on a beautiful spring morning by the typical beat of the saturated slide valve working hard. A second photograph was taken from the road crossing a quarter of a mile before the top of the bank at Ardahan station.

A leisurely trip down to Limerick through unspoiled West of Ireland countryside followed. The public support at Ennis, where our second runpast attempt had to be reduced to a draw-forward, provided valuable custom for the very popular RPSI platform sales team. The West Clare 0-6-2T in the Percy French memorial garden at the station provided an interesting backdrop to our own train. Onward to Limerick, and bed. I will only mention the **official** pre-bed activities. During the planning of the trip we had counted 11 reversals of our train en route, and being an uneven number the coaches would end up turned the other way when they reached Whitehead. For operational reasons this was not satisfactory in the case of 861 and 88, the diner, so these two vehicles were despatched to Limerick Junction behind No.184, and turned on the triangle there.



No.184 departs from Limerick on the Saturday evening of the tour to turn 861 and 88 on the triangle at the Junction. (C.P. Friel)

The other official activity was a Railtour dinner in the Royal George Hotel. Attendance was around 200 and our guests included the Mayor of Limerick and his wife, and the Bord Failte and CIÉ area managers. We had been looking forward to a good meal and were not disappointed.

Neither could we disappoint seventy-five people, local families mainly, who had been oversold tickets for a trip to Foynes and back on Sunday morning. We had pre-allocated 50 tickets for this event,

hoping to fill up empty seats on the train, but the demand at Limerick booking office was so great that 125 had been sold up to Saturday 1800 hours. A hastily convened Operations Committee meeting in the Glentworth Hotel resident's lounge followed phone calls to CIÉ operating staff. After much regaling of the schedule and gradient profile of the branch, we had agreement to an extra bogie being attached for the morning start at 09:00. A last minute lineside bus was also sent along by CIÉ to give further relief to the bursting train.

Tender-first to Foynes we trudged non-stop on a damp, miserable morning. Foynes welcomed us by lifting its cloud to the top of the harbour cliff. Foynes saw more passengers that Sunday than it can have had for a very long time, as the contents of the five bogies spilled onto the track. All too soon it was time to leave again; a steady climb to Askeaton, five bogies packed to the ventilators, and a wet greasy rail, was enough to encourage a sharp departure.

At Ballingrane Junction, the empty train set back up the (closed) North Kerry main line for a short distance, and then drew forward into the Down platform. The planned runpast was not practical with 350 people crowding the small platform. Thanks are due to the signalman and crew who handled our requirements with great patience and understanding.



Crowds of local people mingle with gricers at Nenagh during the photo stop there. (C.P. Friel)

A quick stop at Croom, the extinct junction for the Patrickswell, Rath Luirc line, was a prelude to the beautiful Adare station, where a bus connection Limerick awaited those who braved the slippery footways of the viaduct at the Up end of the platform to get a shot of the train starting out across the swollen, muddy River Maigue.

After a lengthy delay at Limerick, the train departed double-headed, via the Nenagh road. Hundreds of local people turned up to see the train at Nenagh, and Roscrea, where No.184 was detached and where both engines took water. Roscrea was used as an alternative to Ballybrophy, which is at present inoperative.

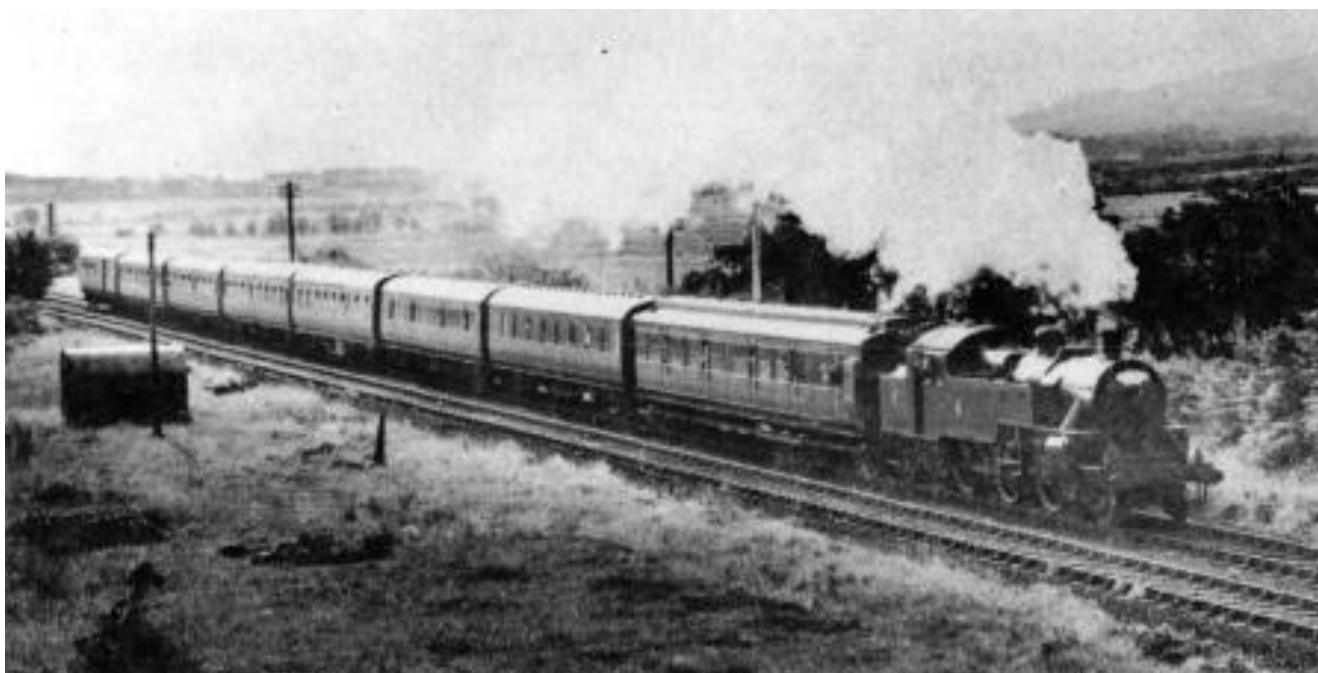
Fate intervened on the run back to Dublin, when one of No.171's bogie axleboxes began to carry heat. Dublin was reached at reduced speed, but fortunately there was ample time for air and sea connections. After a careful examination, it was reluctantly decided that the engine was not fit to haul the train further, so a CIÉ diesel loco was substituted for the nominally 'empty stock' northwards.

It was ironic that this year we had a party of 23 cross-channel friends who had booked the complete long weekend package including the trip to Belfast on Sunday evening, and Belfast Central to Whitehead on Monday.

Fate had not finished for we learned that due to industrial action on NIR the train could not be worked beyond Dundalk. So it was that the final chapter of the "Thomond" was written in a bus, arranged by NIR for the remainder of the journey to Belfast.

No.171 worked back to the North light engine the following day, and was followed by the stock a couple of days later.

Compared to the two-day railtour, the remainder of the operating season is routine, but in the 1982 season we had a promotional nightmare on our hands. We had hoped that 2-6-4T No.4 would be ready after her heavy overhaul for the first "Portrush Flyer". In order to allow time for careful checking after her first service run, the Castlerock extension was not promoted on that date.



No.4 at Ballyclare Junction with the second Portrush Flyer. (C.P. Friel)

It was only when it became clear that it would be unwise to run No.4 on the first Flyer that application was made to NIR to run No.171 on the train. A speed restriction, and the willingness of the NIR crew, ensured that the Flyer would run, albeit tender-first in the Down direction. Fortunately the weather was good. Even so, the train was only partially filled, which would now seem to be the challenge for this year.

The second Flyer started out with No.4, but by Antrim the heat in the bearings was intolerable and the contingency plan sprang into action. No.171 was in steam at Whitehead, and followed the Flyer to Portrush, as No.4 limped on at reduced speed. No.171 arrived in time to take the train to Castlerock, which brought in an additional £280 in fares. A smart run home ensured a successful end to the day.

The third Flyer was so heavily booked (360) that to cancel would have been a big let-down to our

public supporters, not to mention loss of revenue to the Society. So once again NIR were approached for special permission to run No.171 tender-first, and again a willing crew came forward.

This time the weather was wet and cool and it was with real skill and co-ordination that the crew successfully topped the bank at Mossley with a full load of 8 coaches and the engine running in reverse on a wet rusty rail. This was an omen for the rest of the trip which went ahead without a hitch, 120 people enjoying an afternoon outing to Castlerock.

One interesting and encouraging feature of the third Flyer was the presence of a large party of members and their families from the Northern Ireland Electricity Service Sports and Social Club. We look forward to them joining us again next year and who knows how many other clubs could be persuaded to use our excursion as a day out.



*No.171 on her home ground, having just passed Cloghogue Chapel on the first Steam Enterprise.
(C.P. Friel)*

The Flyer season as a whole barely covered our expenses and the 230 empty seats would have gone a long way towards covering our operating costs if we had managed to sell them. We must work harder in 1983 to fill the train on the first two dates if the "Portrush Flyer" is to remain on the calendar. The "Steam Enterprise" series showed a financial improvement on the Flyer season and a further 50 seats sold would have covered the Operating Cost of the two trips on the 4th and 18th September. As usual, the first trip was only partially filled, while the second was almost a complete sell out. So the challenge remains to fill the first trip and keep the "Steam Enterprise" going strongly. And how strongly No.171 went in 1982! On her home ground she surprised and delighted hardened timers who scurried through old log books in attempts to find an equal or better performance from a locomotive in her class. Her

climbing and running performance with 8 heavy coaches (equivalent perhaps to 9½) could be described as outstanding and is a tribute to the NIR crew, and the RPSI volunteers who maintain and prepare her. Roll on September!

The last operation of the season was the transfer of coaches to Mullingar for the winter train rides, which was scheduled for 25th September. Unfortunately, No.184 had been withdrawn for boiler repairs and plans for a combined Belfast-Dublin and Dublin-Howth trip had to be cancelled. However, CIÉ were approached by a film company (Richard Wagner Films) from Austria for the hire of a steam train and we were fortunate in being in a position to negotiate a contract with this company for the making of a TV film of the life of Richard Wagner. Our empty carriage working to Dublin became a shopper's special but we had such a short time to promote this trip that just over eighty people travelled up by the steam and back by service train to Belfast.

FROM THE TREASURER'S DESK

John Richardson

As one who has little time to pen magazine articles I was very amused to read in an English railway society magazine of how one august member single-handedly, no less, ran the annual ballot. This glowing report which ran to two pages gave a blow by blow account right from when he visited the printers to his 14 (!) visits to the bank to lodge proceeds - the result of his labours, £259.

We fared somewhat better - but I do not need 2 pages to describe the action - net profit, £1,190 - a record. Many thanks to all who supported my effort.

Another bright note is our fund raising results for the past year. In this sphere we are far ahead of the pro rata on several of the major cross-channel railway organisations, indeed one society lost a considerable amount in its sales operation - we made a net injection to Society funds of over £11,500 - this entails a turnover of around £40,000. Without this source of revenue the Society would be unable to continue. I look forward to the approaching Christmas season as a fresh opportunity to benefit the Society financially - it is a pity that the editorial red pen could not have been used constructively in the last issue of "Five Foot Three" when unenlightened comments were penned about this facet of Society activity.

It is indeed rare for me to write in the magazine and I would take this opportunity to set out roughly the present duties of my post. These have, like Topsy, "just growed" through the years and it is proving impossible to find free time to pursue any other interest. If there is a way in which you could lessen the load - let me know.

Tasks include: maintenance of all financial records and cash book, VAT book, wages records (4 employees), sales records and orders (wholesale), and retail. Stocking shop - attendance with sales van at events for about 6 months of the year.

Returns include insurance and National Insurance, VAT and tax - reconciliation of bank statements (6 accounts) - average activity 25 to 30 transactions per week. Covenants and standing order subscriptions.

I would like to elaborate but I haven't time - I have to make a phone call about ????

PUBLICITY

John Friel

When I took over the role of Publicity Officer early in 1981, it was nine years since the first occasion that I assumed the role. In those nine years so much has changed in the RPSI.

At the start of the 1970s the Society's events consisted of (usually) four railtours per year, and publicity took the form of circulars to the members and adverts in the English magazines. The only event to be advertised publicly was the annual "Open Day" at Whitehead.

Nowadays, with the possible exception of the two day railtour, every event is a public one. In 1983 we will have "Easter Bunny" trains, the "Claddagh" railtour, the "Steam Gala" at Whitehead, steam train rides at Whitehead (every Sunday in June, July and August), the "Portrush Flyer", the "Steam Enterprise", Santa train rides, and winter monthly meetings in Belfast. All of these need a full scale publicity effort - the Publicity Officer certainly has more to do than in the past.

The last nine years have seen a complete transformation in the attitude of the media to our activities. We used to be treated like overgrown schoolboys with headlines such as "Getting All Steamed Up About A Train Ride". Today, the same activities are regarded as highly respectable, thanks in part to television coverage of events like Shildon and Rainhill. The "Portrush Flyer" in particular is now treated as an integral part of the summer scene in Northern Ireland.

To meet the need for more publicity, several innovations have been introduced. Every passenger on our trains, and visitor to Whitehead, is given a duplicated sheet listing coming Society events. A telephone answering machine has been installed at Whitehead. Callers hear a one minute tape on coming events and can leave their names and addresses for details to be posted to them. Using a special bleeper provided, it is possible to phone the machine from one's home - a wonder of modern technology.

Press releases are still the backbone of our publicity, accompanied by photographs. For these, I am grateful to my brother, Charles, who has produced an unending supply of excellent photos during the last ten years.

Radio and television coverage of our events is quite extensive, all of which helps the image of the Society. We feature in the Northern Ireland Tourist Board "Coming Events" posters, the "Today's Events" columns of the daily newspapers and in the various guides to steam centres produced in England.

Recently, we have been placing adverts for our events in newspapers. The cost of these is offset, to some extent, by grants from Coleraine Borough Council for the "Portrush Flyer" and from Bord Failte for the "Steam Enterprise". The cost of adverts in local papers is very much cheaper than in the dailies, and the weeklies tend to be read more thoroughly.

Despite all the activities that I have just listed, we are still in the situation where the first "Portrush Flyer" and the first "Steam Enterprise" trains run half empty. While there are still seats to fill, we must try to improve our publicity, and I would be glad to hear any suggestions that you have to make, bearing in mind that funds are always limited.

One idea that I would like to pursue is the improved circulation of posters. This involves the sending of posters, with a covering letter, to theatres, cinemas, hotels, leisure centres, libraries, etc., and I would appreciate any offers of help with addressing and stuffing envelopes. If you would like to go around your own area asking shopkeepers to display posters, please contact me for supplies.

The Society has a set of publicity boards which outline our activities mainly through photographs. They measure 8' wide by 6' high and are very easy to erect. If you can arrange anywhere for these to be displayed, especially before one of our events, please let me know.

Finally, thanks to Alan Love for his help in handing over the Publicity job, and to Robin Morton for acting as Publicity Officer during my summer absence.

LOCOMOTIVE MAINTENANCE

Peter Scott

No.3 "R.H. Smyth" (ex LP&HC 0-6-0ST shunting locomotive)

Whitehead.

Work is currently in progress replacing some of the boiler tubes. Cost is being kept to a minimum by

using second-hand tubes from locomotive No.184, which are shortened by removing both ends. It is the ends of a boiler tube which deteriorate most, therefore it is possible to get several years more from the centre portion of the tube. At the time of writing, the leading wheelset is removed from the locomotive to allow repairs to be carried out to the axleboxes. These were badly worn resulting in an excessive amount of sideplay on the front axle.

No.3BG “Guinness” (ex A. Guinness 0-4-0 ST shunting locomotive)

Whitehead. In store.

Requires retubing.

No.4 (ex LMS NCC 2-6-4T locomotive)

Whitehead.

The essential parts of the general overhaul were completed in a hurry in order to try to fulfil the traffic requirement that No.171 should not run tender-first to Portrush. (There is now no turntable in that area.) There was neither the time nor the opportunity to adequately run the locomotive in. As a result, trouble was experienced with two axlebox bearings and one big end running hot. The damage is of the extent that it will be necessary to replace at least one of the brass bearings, in addition to remetalting.

Undoubtedly, a contributing factor was the poor state of the axle journals, and the opportunity will now be taken to turn these true, using the ex York Road Works wheel lathe which is currently being installed at Whitehead.

No.23 (ex Irish Shell 0-4-0 Diesel Mechanical shunter)

Whitehead.

Remains in traffic as Whitehead Depot shunter, following repairs to the clutch and renewal of the cylinder head gasket.

No.27 “Lough Erne” (ex SL&NCR 0-6-4T)

Whitehead.

In store pending major overhaul.

No.85 “Merlin” (ex GNR(I) 4-4-0 V class Compound locomotive)

Whitehead.

The problems being experienced with No.4 are hindering progress on this locomotive, but sheet metal repairs to the tender and replacement of tender springs are currently in progress.

No.171 “Slieve Gullion” (ex GNR(I) 4-4-0 S class locomotive)

Whitehead.

Minor repairs are planned over the winter, such as renewing the hardwood beam behind the front buffers. The bogie axlebox which ran hot during the 2 day tour was remetalled, and the journal was trued up by Kanes foundry in Larne.

No.184 (ex GSR 0-6-0 J15 class locomotive with saturated boiler)

Mullingar.

Retubing is in progress, also repairs to the firehole ring and front tube plate. The 3,345 gallon tender latterly paired with this engine was transported by road to Whitehead for sheet metal repairs.

No.186 (ex GSR 0-6- J15 class locomotive with superheated boiler)

Whitehead.

In store pending retubing, replacement of superheater elements. Smokebox repairs, including new smokebox door.

No.461 (ex GSR 2-6-0 K2 class locomotive)

Mullingar.

Retubing in progress on a standby basis.

CSÉ 0-4-0 Diesel Mechanical Shunter

Whitehead.

Awaiting engine overhaul.

Wheel Lathe

The wheel lathe recently acquired by the Society from the former works of the LMS (NCC) - now Northern Ireland Railways' main workshop - is being installed as an extension to the wheel-drop facility at Whitehead. At the time of writing, a reinforced concrete base has been put in, and the lathe, dismantled for purposes of transportation, has been re-erected with the help of a rail-mounted crane. The overhead gantry on the wheel-drop is being extended, and a hut is being built round the lathe to protect it. The lathe is powered by a DC motor, so a rectifier is being specially built to suit the 3-phase AC supply at Whitehead.

LOCOMOTIVE RUNNING

Brian Hill

This journal now welcomes a new scribe, my having been 'persuaded' to occupy the Locomotive Running post vacated at the last AGM.

No sooner had I settled into the job than planning began in earnest for the main event of the year, the "Thomond" tour to Limerick.

Portarlinton, on the ex GS&WR mainline, epitomised the major tour problem for locomotive running - namely the availability of water. With Kildare recently demolished and over eighty miles to run from Dublin to Athlone, replenishment was needed en route, especially if an adequate reserve was to be maintained to cover unforeseen delays, such as occurred at Clonydonn. However, Portarlinton, the only intermediate location with an immediately feasible supply, could offer at best a low pressure 2½" diameter hydrant; thus a 45-minute stop on the Down Cork mainline transpired - a poor comparison to spending several minutes at a 'proper' column. To assist water flow, a rigid pipework arrangement was devised to eliminate the inevitable bends a flexible firehose endures when draped over the side of a tender. On Sunday afternoon this equipment helped attain a ten minute early (!) departure from Portarlinton towards Dublin.

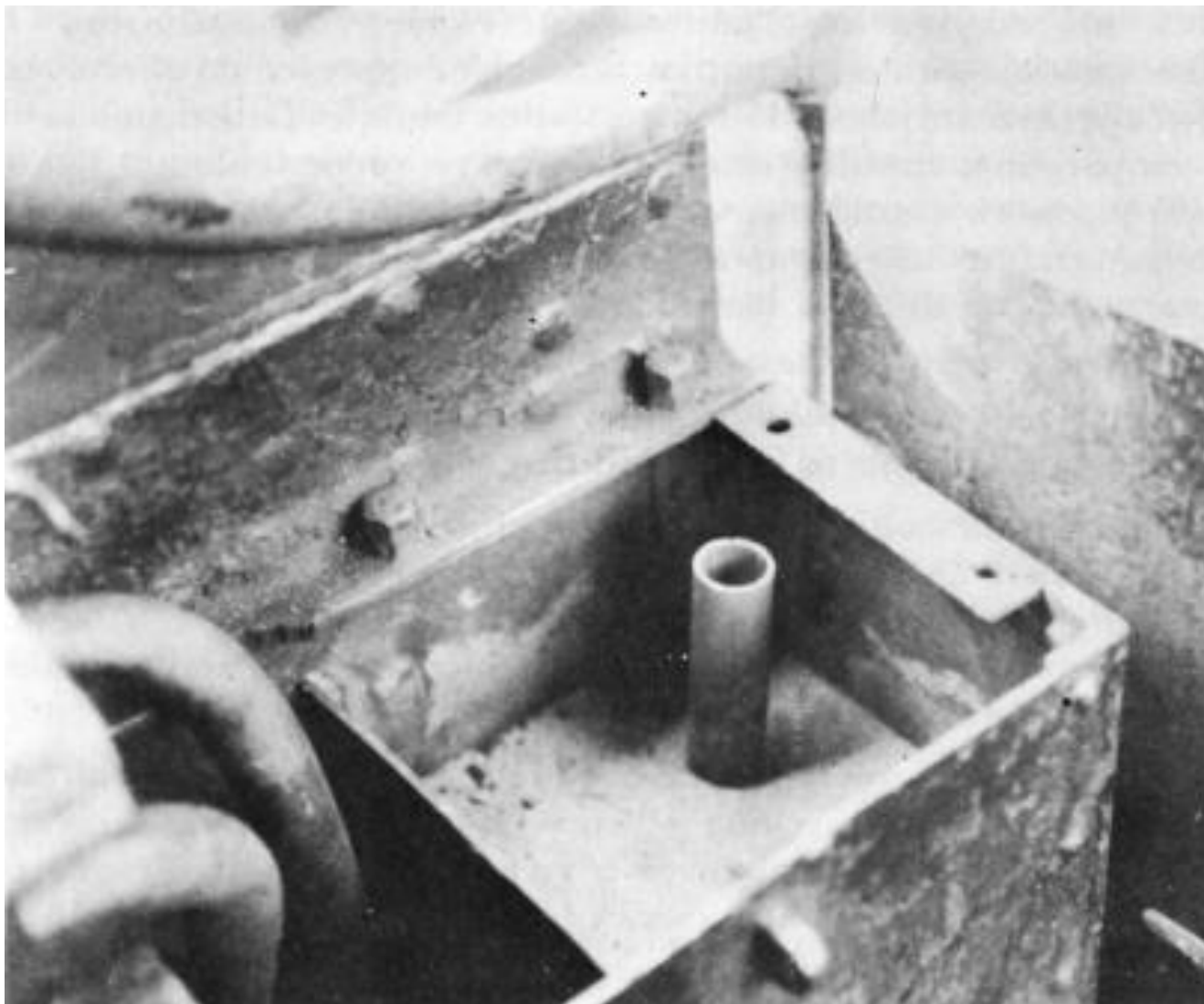
In a similar vein, Ballybrophy column was inoperative due to frost damage; fortunately Roscrea was able to fill the breach.

Although such difficulties were overcome this year, the clear trend is that locomotive servicing facilities are disappearing, or at least not being kept in working order. The Society must urgently reconsider its tour policy in view of these circumstances and decide what furrow to plough. Without proper water columns and turntables future tours may have to be curtailed in their extent.

A more unusual occurrence for a 2-day tour was the provision of an 'alternative' railtour. No.171, barred from travelling Athenry-Limerick direct, was accompanied by workshop coach 114 plus a few passengers to give an enjoyable jaunt via Portarlinton and Limerick Junction; arrival at Limerick being hard on the heels of No.184.

Unfortunately, the tour did not end well for No.171, with the left trailing bogie axlebox overheating

during the Sunday evening run into Dublin. After removal from the train the engine ran light to Dundalk the same evening and continued on the next day to reach Whitehead. A visit to the wheel-drop at Whitehead permitted the remedial work to be quickly accomplished and the locomotive returned to traffic.



No.171's rear sand gear. Sand from the sandboxes under the seats in the cab is hand fed down the tubes. (C.P. Friel)

The Portrush Flyers were supposed to witness the 'much heralded' (by some people) return to train haulage of the tank engine, No.4. However, it was No.171 which had the honour of declaring the tenth season open, the locomotive working the train home from Portrush tender-first due to the lack of NIR turntables outside of Belfast. The second Flyer had No.4 at the front of the train, but by Antrim all was not well, with the big ends carrying an abnormal heat. Although the decision was taken that No.4 could continue, arrangements were swung into action to summon No.171, already in light steam and prepared at Whitehead. No.4 did reach her destination, but having added an overheated driving axlebox to her problems.

No.171 ran into Portrush in 140 minutes from Whitehead by way of Bleach Green emergency crossover, and within 10 minutes was heading eight coaches off to Castlerock. Return to Portrush saw No.171 fire-cleaned, watered and oiled with but 5 minutes to spare before departure for Belfast.

Delay in leaving Portrush saw No.4 only as far as Ballymoney before the Flyer overtook her, the crews (both NIR and RPSI) having to endure the 'delights' of Ballymoney for over three hours waiting for a path on the single-line section to Ballymena. The knock-on effect of this layover was an arrival in Belfast at 11pm, after the Larne line had shut down for the night. Thus the engine had to be left dead at York Road and the footplate men left home care of road transport summoned from Whitehead. No.4 reached Whitehead the following Tuesday.

It was therefore of necessity that the "Portrush Flyer" again provided No.171 with a glimpse of the North Atlantic, this time performing the morning run down tender-first. A wet morning for the climb up through Mossley saw effective use made of the new sand-gear fitted for such reverse working, the sand being hand-fed from the cab.



*The hand-fed sand is deposited on the rail immediately to the rear of the rear-most driving wheels.
(C.P. Friel)*

September saw No.171 and train, plus the loading shovel, spending their annual holiday at Central Services Depot. No.171 carried out her "Steam Enterprise" duties in a satisfactory manner but with her coal consumption rate increased by the presence of a certain amount of slack. Grade 'C' household coal has been burnt throughout this year with only the load delivered to CSD giving any significant

problems.

The combination of this slack and dirt scraped up by the bucket of the loading shovel caused the fire-cleaning stop at Goraghowood on the one-way trip to Dublin on 25th September. It is my intention to try to ensure a minimum of slack content in future purchases of fuel, despite the inherent difficulties ensuing from our operating methods.

As no doubt chronicled elsewhere, No.171 performed in some filming at the end of September, returning afterwards to Whitehead for winter hibernation without major defect.

By the time this magazine is published, the “Santa” trains will have run. Operated to placate the financial situation, there are nevertheless risks attached, both from the weather and detrimental effect on rolling stock maintenance programming and, by implication, railtour planning.

To diverge slightly, the latest addition to rolling stock is the RPSI lorry. This is an ex-NIC 32-ton Guy tractor unit powered by a 220 Cummins diesel engine; it is owned and maintained by three Whitehead members, and operated under Society auspices, including being painted in RPSI colours (not coach livery!). Loads conveyed include coal, loading shovels, coach seats, track materials and scrap, the most notable being a J15 tender from Mullingar to Whitehead. Several hundred pounds have been saved on transport costs to the Society.



The Society lorry coupled to a container load of coal for the two day tour. The contraption to the left of the lorry which looks like a medieval siege machine is the coal bagging plant, in which the coal was bagged before being loaded in the container. (C.P. Friel)

To round off, I must particularly thank Paul Newell (my predecessor), Peter Scott (Locomotive Maintenance Officer) and Frank Dunlop (NIR locomotive inspector) for all their assistance and co-operation. Also Chichester Street Fire Station, Sidney Blakely of Holywood Fire Station, Mr

Kirkpatrick of FKN Services (especially for the donation of a standpipe and firehoses), Esso, CIÉ, NIR, Dennison Haulage, Cawoods, James Corey & Co. and everyone else who have been of help.

The statistics for 1982 so far - coal burnt equals 90 tons, mileages are:

Locomotive	Train Miles	Light Engine Miles	Total Miles
No.4	138	199	337
No.184	511	195	706
No.171	1,719	401	2,120
Grand Total			3,164

CARRIAGE & WAGON

Alan Edgar

I am pleased to report that the restoration of our carriages and wagons has continued unabated, though the results of this will not become apparent until the 1983 operating season commences.

GS&WR 1st 1142 has been the major project at Whitehead, and by October 1982 the exterior had been completed, allowing the coach to be moved out of No.5 shed road. By this time most of the interior joinery had also been finished. Our ACE (Action for Community Employment) scheme joiner, Jim Robinson, had to tackle some quite intricate work, where some of the ornate fluted panels in the compartments had been damaged by rot. Many of the hardwood panelling sections used were made from second-hand timber recovered from the bodywork of Multi-Purpose Diesel trailer 533, which we broke up at Whitehead. This represents an enormous saving, as hardwood of the quality required is prohibitively expensive.

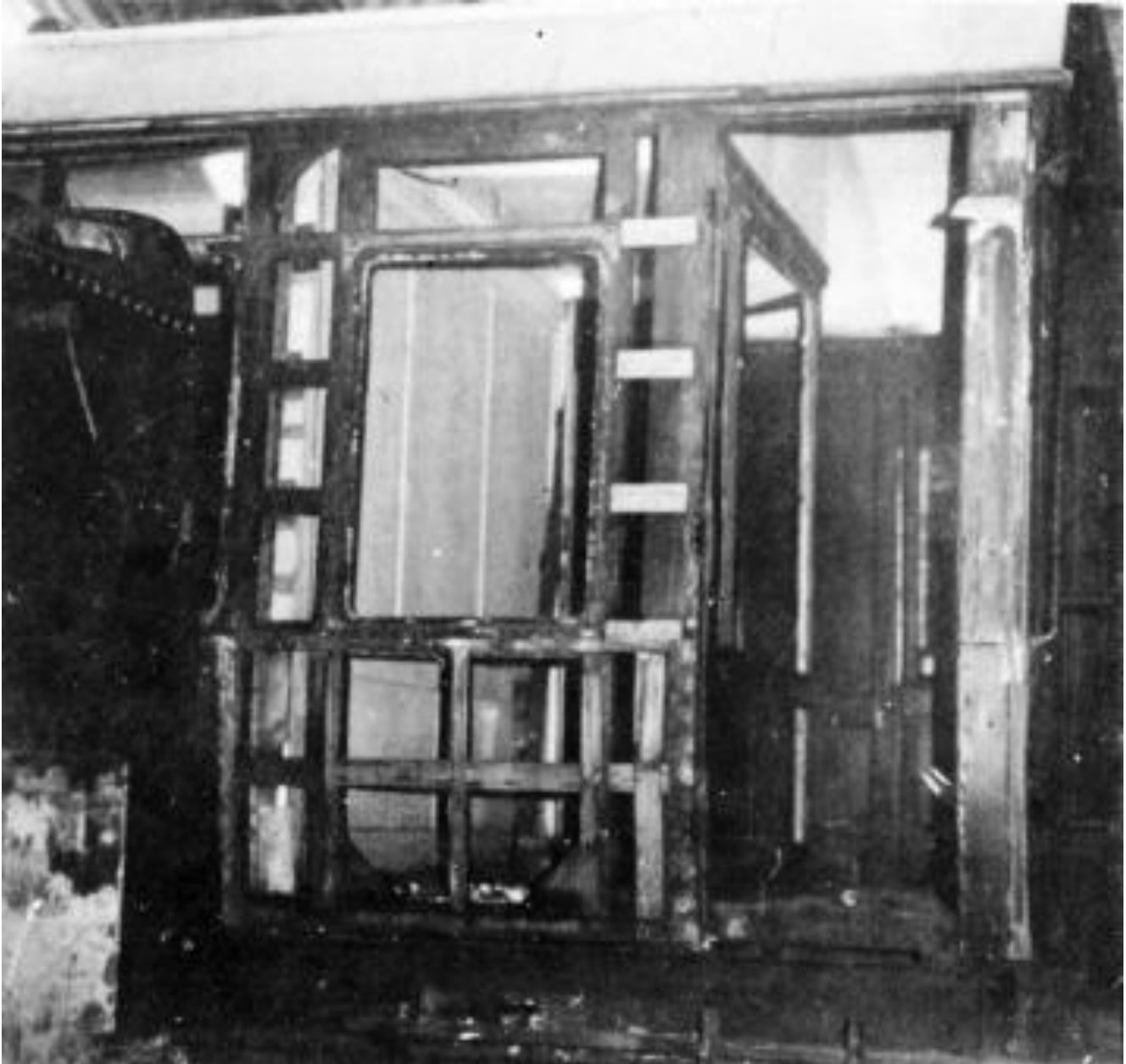


GNR brake 1st 231 cocooned in polythene sheet. (C.P. Friel)

At the time of writing, 1142 requires the ceilings recovered with embossed wallpaper, the interior varnished, and then the luggage racks, seats, electrical fittings, plumbing, and floor covering fitted to

complete. She should therefore be running in 1983. The seats are being re-upholstered by the Limestone Youth Training Project. We already have the backs - excellent job they are, and are awaiting the cushions.

1142 has been painted in GS&WR style, dark maroon, fully lined out. This livery was perpetuated by the GSR up to 1930, so we therefore intend to apply GSR crests to the coach, the logic being that only one batch of transfers will be necessary to cover the ex GS&WR stock and the Bredins, which are of GSR parentage. We could also turn out the stock of absorbed companies - such as the MGWR 6-wheelers - in GSR livery.



*Work in progress on the North Atlantic brake. The lavatory area is stripped down for repair.
(C.P. Friel)*

A batch of transfers is being specially manufactured, based on an original very kindly loaned by Mr Henry Beaumont. The Great Southern Railways crest is a particularly attractive piece of artwork, and

to help cover the cost of producing the transfers, a limited number of them (they are approximately 12" in diameter) will be mounted on plaques and made available for sale, at a bargain price of £10.

Bredin 1327 is now virtually complete internally, but awaits a suitable opportunity to be moved indoors for the replacement of 3 door panels and an external repaint. 1327 will be the second carriage to benefit from the manufacture of the GSR crests.

The group of members mentioned in the last magazine who are working on diner 87 have made steady progress, but a setback occurred when it was discovered that much of the framework of the kitchen partitions was rotten. The partitions have now been replaced, so we are hopefully still on target to have 87 running in 1983. Like 1327, 87 awaits an opportunity to be moved indoors for external repainting. The GNR Directors' Saloon, 50, has unfortunately been dormant in 1982, but we are hopeful of finding an opportunity to use it during the 1983 season. 50 has now been lettered in GNR style, and a broken window has been replaced. We are considering the possibility of fitting a hand brake and vacuum valve in one of the vestibule ends. This would convert the saloon into a brake vehicle, and allow full advantage to be taken of the observation end over many sections of CIÉ, where it is not permitted to run coaches behind the trailing brake vehicle on the train.



Jeremy Saulters (left) and Thomas Charters painting the CIÉ 20-ton brake van. (C.P. Friel)

The other coaches in traffic have received mainly running repairs, and some of them are now very much the worse for wear from the passengers' viewpoint. At the earliest opportunity we hope to replace Bredin 1335 and GNR diner 88 with 1142 and 87 respectively, while 861, the 12-wheel brake, will be replaced by the latest occupant of No.5 road, the North Atlantic brake, 91. Work is proceeding rapidly with the exterior panelling and by the time the magazine appears the coach should be completed externally. This and other work has been carried out by two new joiners employed under the ACE scheme. They are Thomas Moore and Frank Gallagher, who is a member of the Society and a regular participant on railtours. The ACE scheme operates on a yearly basis and the time ran out in early October for the previous employees, who are not eligible to re-apply. However, Tommy Dorrian has stayed on as a volunteer, and continues to perform many useful tasks.

Of the other running coaches, 241 has benefited from an internal repaint, which was partly completed

while the coach was at Mullingar, and was subsequently finished at Whitehead. This coach and its twin sister 238 have also received much needed sets of new leather window straps.

One of our (often forgotten) wagons has been the subject of attention recently. This is the CIÉ 20-ton brake, 23574. The windows have been glazed, and the whole vehicle given a repaint in early CIÉ livery. A small but enthusiastic group of members completed this work in time for Santa Claus trains.



Lavens Steele at work on the interior of dining car 87. (C.P. Friel)

We have recently taken custody of a second NIR coach in addition to ex NCC open 3rd 526. This is 727, which was the last Great Northern Railway passenger carriage to remain in traffic. NIR have recently condemned a large number of redundant vehicles, including the two mentioned, so we are hopeful of completing purchase in the near future. Members will be pleased to hear that the recent appeal for funds to purchase these two carriages was successful. 727's purchase is being funded by a syndicate organised by our London Agent, Leslie McAllister. I would like to thank all those who contributed to the funds for either of these carriages. Both will require a considerable amount of work, but will be extremely useful additions to our operating stock.

Finally, I would like, as usual, to thank all of those who helped with the carriage work, in whatever way, however small.

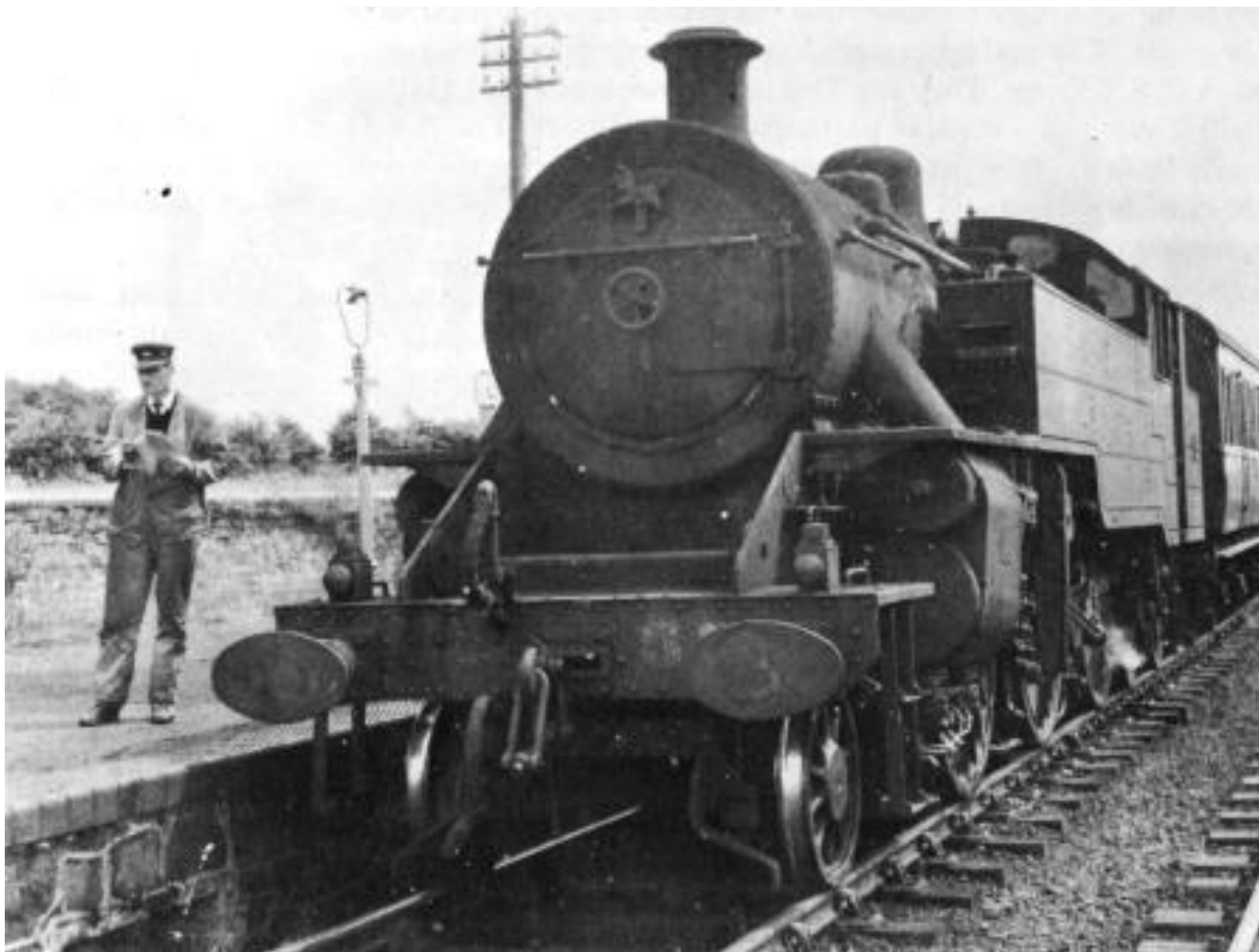
RAB GRAHAM - A TRIBUTE

Irwin Pryce

The skill and hard work of footplatemen on our trains cannot have gone unnoticed by even the least observant of our passengers. Whether that skill is shown as No.171 is nursed at walking pace tender-

first under nearly impossible conditions over the last mile to the summit at Ballyclare Junction, at 70mph on the “Steam Enterprise”, or less glamorously with the shovel on that testing climb from Dundalk to Bridge 130, it has been noticed and appreciated.

It was with shock that we learnt of the sudden death on 1st August 1982 of Rab Graham, one of that band of enginemen whom we have come to depend on. Rab had been a valued friend for many years, and the sight of that lean figure on an engine, viewing the world with that waspish smile, was a guarantee of a fast and economical run. His style of enginemanship, with a complete lack of those features which some enthusiasts associate with steam engines; noise, sparks, and volumes of black smoke, showed mastery of the finest kind over his engines, and the evident pleasure he derived from discussing his running with those of us who took an interest in his work remain a tribute to him. Even in the days of rundown engines and low morale we could be sure of an exhibition of fast and economical running in the manner typical of the NCC at its best.



Rab Graham consults the working timetable during a 17 minute wait at Cullybackey to cross the 12:45pm MPD from Londonderry. No.50 is working the 1:15pm Belfast-Portrush on 25th July 1969. (I.C. Pryce)

A few glimpses into the past will serve as a tribute to Rab:

The spotless footplate of No.50 during the years when he shared her with Al Robinson on the Stone Trains, the burnished steel and polished brass and copper showing the pride both men took in their work.

In the week following the imposition of a 50mph restriction on all of the tank engines, an official not noted for his interest in, or knowledge of, engines strode up to Rab as he stood beside No.53 on a Londonderry train and brusquely said “50 miles an hour, driver!” Rab’s reply, delivered with a hint of a mocking smile, was simply, “Yes sir!” The real meaning was clear to that gentleman and any further instructions on handling steam locomotives were cut short. The business-like start out of York Road can have left him with no doubts as to Rab’s meaning.

The struggle each day for a week to Portrush with a steam-shy No.50, with his namesake Willie Graham, when they brought 8 bogies in on the 5:50 ex Portrush spot on time, **and** on the diesel times, showing that blend of skill and teamwork needed to get the best out of an ailing engine.

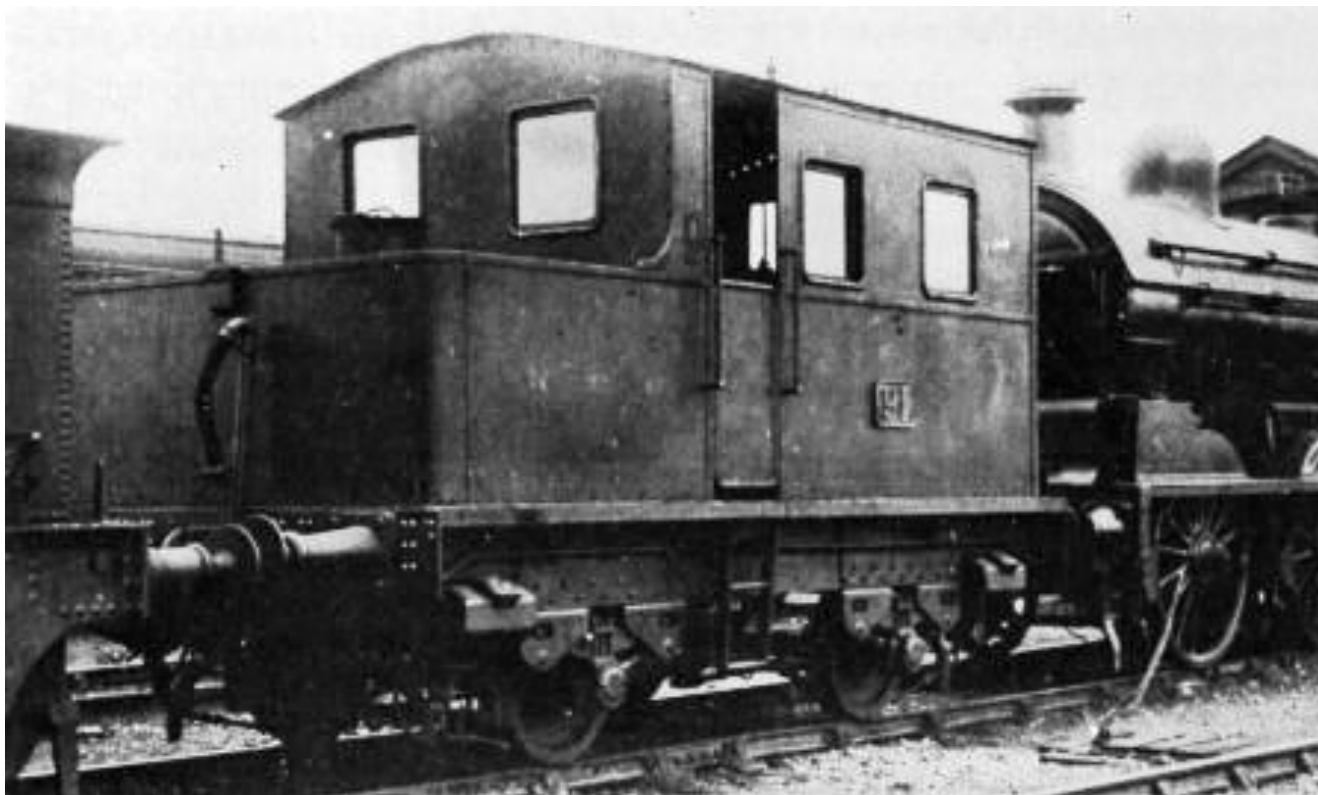
The rush back from Portrush to Whitehead by car, followed by a hectic dash to Portrush with No.4 light engine, and a sparkling run home on the Flyer in an effort to regain lost time.

Those of us privileged to have known “Sunshine” will miss him.

IT ALL BEGAN IN PETTIGO (PART 3)

R.A. Read

To complete my 1931 notes I can mention a visit paid to York Road shed where I noted small NCC 4-4-0s 61 and 68 painted red. 10, a small double-framed 2-4-0, was seen as well as 46 of the large-boilered variety. Of the smaller locomotives, 47, a black 2-4-0ST, and 91, a red Sentinel, were present. 4-4-0 73 was just out of the shops in red livery while other red locomotives were 50 “Jubilee”, 2-4-0 45 and 0-6-0 15. I took a photograph of 81 “Carrickfergus Castle” whose driver J. Shaw wanted a print.

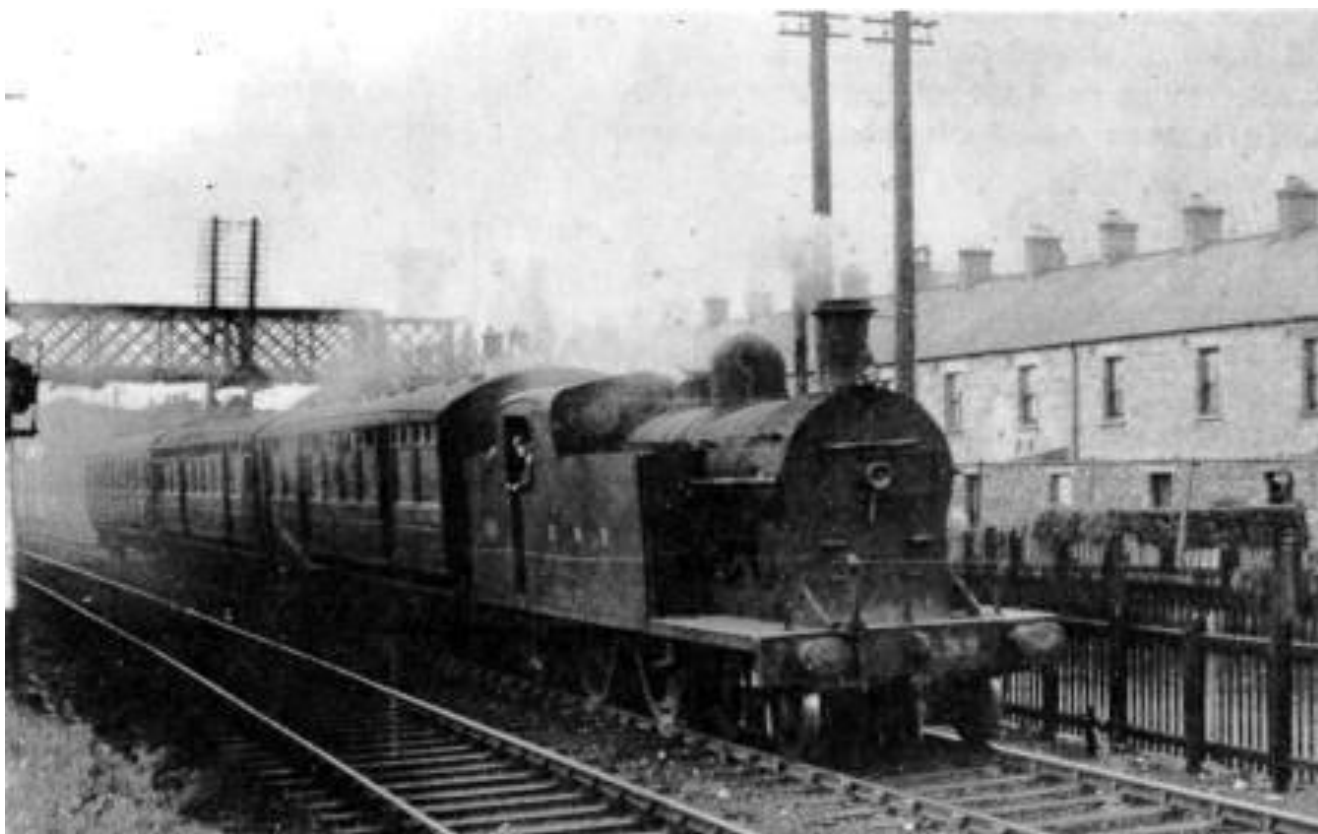


NCC Sentinel 91 was built in 1925, but by 1930 was lying out of use at York Road, though still very clean externally. (Lens Of Sutton)

On 8th July 1937 I crossed to Belfast from Glasgow in the “Royal Ulsterman”, and next day I noted 4-4-0 170 on the 2:45 to Dublin, 4-4-2T 139 on the 2:50 to Lisburn and 4-4-0 192 on the 3:10 to Clones. At Adelaide shed old Irish North Western 0-6-0 37 and ex Dublin and Belfast Junction 0-6-0

40 were noted with long chimneys, but 138 ex Ulster Railway 0-6-0 was cut down to work in the harbour area. 137, a sister engine with similar wavy running plate, was very dead inside the shed along with old 0-6-0 149 (cut down) which had been withdrawn for some time. Class LQG 160 was lying with its tender end smashed in. Some of the new 1937 UG 0-6-0s had arrived and I noted that 79 had its red buffer beam outlined in white whilst the engine itself had red lining to its shiny black livery. 80, with its tender sides curved in at the top, was also there.

On 10th July I travelled in my Uncle Sam Wilson's car (a Star - quite a rare breed) to Enniskillen, noting on the way a long-funnelled Clogher Valley tank at Fivemiletown. A cousin of mine in Enniskillen, Richey Wilson, was a prominent organist in the town, and like many organists he was a railway enthusiast. Unfortunately, he was killed in a road accident some time ago, as many of his tales of wartime footplate runs from Belfast could have expanded this article. On 11th I made a trip to Pettigo with my father, J.A. Reid, to see again his birthplace, and we had small 4-4-0 72. Next day an Orange parade was taking place in Enniskillen and this brought in old 4-4-0s 42 and 43, the latter having an outside-framed tender. 4-4-0s 12 and 45 and 0-6-0 PG 103 also came in, but the most interesting formation was a train from the Clones line of 3 Great Northern, 3 Great Southern and 3 Dundalk Newry and Greenore 6-wheelers, the latter in London and North Western livery. A photograph of these appeared in Part One of this article.



GNR T2 Class No.139 drifts into Adelaide with A Belfast-Lisburn local on 13th June 1950. The first two bogies are converted steam rail motors, (H.M. Rea)

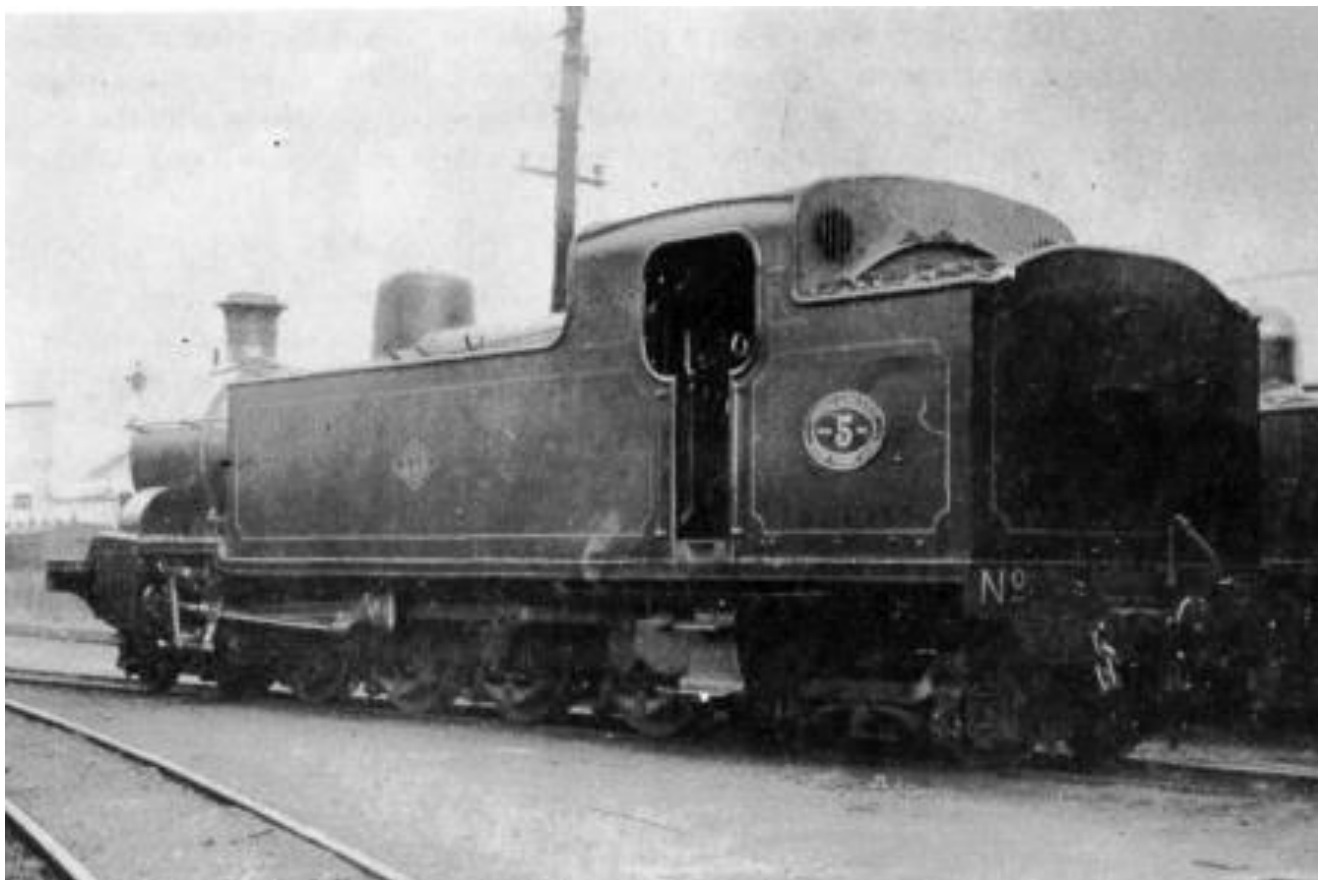
On the Sligo Leitrim and Northern Counties side, "Sir Henry", one of the larger 0-6-4Ts, was noted, while the smaller ones, "Leitrim", black with red nameplate, and "Hazelwood", were also in. Railbus A (Associated Daimler) plus trailer was working the regular service. Next day, the ex GNR 0-6-0 "Glencar" was seen with red nameplate on the middle splasher.

On returning to Belfast I noted 4-4-0 73 at York Road still with a round top firebox, as had 4-4-0 50

“Jubilee” and 2-4-0 57 “Galgorm Castle”.

Among the newer engines seen were 2-6-0 93 “The Foyle” in red livery and 17, a Harlandic diesel. Dead at the shed were 0-6-0s 13 and 15, small 2-4-0 23 and 46, a large-boilered one. 30, an old 0-6-0, was still carrying the letters “MR NCC” on the tender. Apparently stored were 0-6-0 54 and 1875 0-6-0 43.

The next visit took place after the war, during which among other activities I had to explore the Kenya and Uganda Railway whose locomotive stock was then about two hundred; similar in number to the GNR(I) but vastly different in types, which included 4-8-0s and Garratts. In 1952 we went to Enniskillen via Omagh on the 11:25 to Londonderry on 10th August when I got a glimpse of compound 85 “Merlin” in blue livery at Adelaide and got my first view of the new 4-4-0 210 “Erne” on a Dublin express at Portadown. Everything, of course, was in a run-down condition after the war; unpainted railings, dirty locomotives (with a few excellent exceptions) and tattered carriage seats.

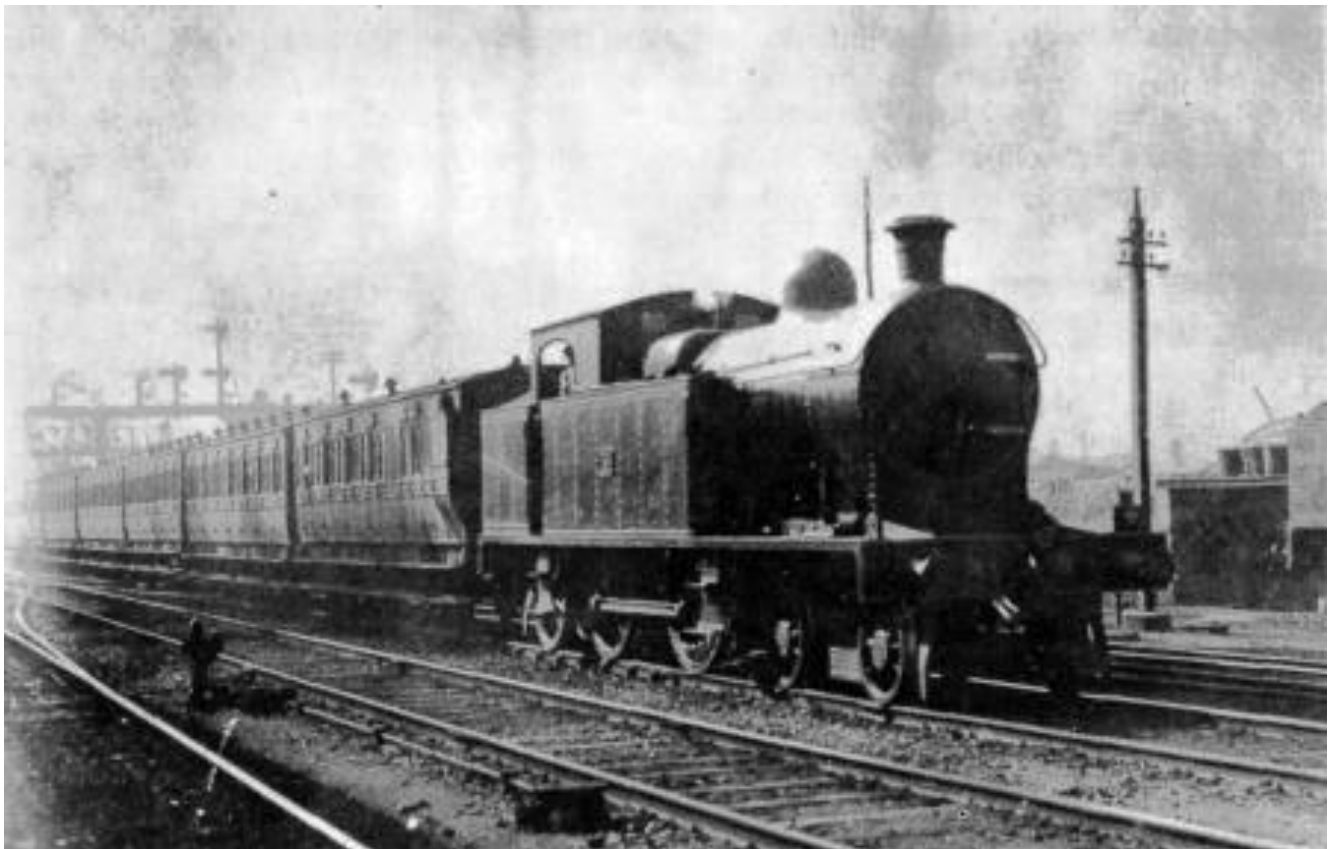


One of the massive Lough Swilly 4-8-4Ts, No.5, seen at Pennyburn shed. (Real Photographs, x8490)

At Portadown was small 4-4-0 104 along with Q class 120 and 130, while at Dungannon old AL class 0-6-0 35, 175 (SG) and 4-4-2T 139 were around. Omagh produced blue 4-4-0 205 “Down” and Qs 122 and 135. Our train to Enniskillen was in the bay on the west side of the line with the engine, small 4-4-0 75, facing the buffer stops. When the Londonderry train had left, we backed out and then set off on the line to Enniskillen where we arrived to see small 4-4-0s 26, 27 and 77, along with NQG 0-6-0 9. “Lurganboy” was in the SLNC section of the station. Next day blue 4-4-0 202 “Louth” took us to Pettigo on the Bundoran train, and on return SLNC “Enniskillen” and GNR 4-4-0 105, class AL 0-6-0 32 and 59, and SG3 49 were visible. On 12th August we went to Londonderry, having 4-4-0 46, black but with a new tender and a shortened chimney, as far as Omagh. Red “Meenglas” of the County

Donegal Railway was at Strabane and another, "Blanche", at Derry. A quick visit was made to the Lough Swilly shed at Pennyburn. 4-6-0T 4, 4-8-4Ts 5 and 6, and 4-6-2Ts 10 and 15 were seen, while 4-6-2T 16 looked as if it was being scrapped. On 14th we returned to Belfast via the UTA on the 3:45 behind 4-4-0 69. Old 66 "Ben Madigan" was shunting at Londonderry and, in contrast, a brand new 2-6-4T 55 was at Ballymena. BCDR 4-4-2T 230 was at Belfast shed along with 28, a diesel, and two very dead locomotives, 4-4-0 64 and 34. A visit to York Road on 17th August was interesting because of the various liveries to be seen. 82 "Dunanie Castle" was newly ex-works painted black with red and yellow lining, 2-6-0 90 "Duke Of Abercorn" was in dark green, while 2-6-4Ts 8 and 51 were black with LMS lining. 56 had newly arrived but 2-4-0 33 was well on the way to being scrapped.

BCDR 4-4-2T 209 was on the shed, and in the works were 2-6-0 101 "Lord Masserene", 102 and 4-4-0 76. A visit to the BCDR shed showed that most of the locomotives by now had 200 added to their numbers, but not 2, 4, 6, 10, 26 and 27. Later notes seem to me to be quite modern but I suppose after all they are 30 years old!



BCDR large tank No.8 gets away from Queen's Quay with a Bangor train in 1948. (Unknown)

THE NCC JEEPS - EVOLUTION OF A DESIGN

Norman Johnston

During the 1981 Whitehead Steam Gala, I happened to stray into our engine shed where some of our 'dead' engines were residing, and fell into conversation with an English visitor who was quietly surveying NCC 2-6-4T No.4, at that time partly dismantled for repair. Our chat soon turned to the very LMS appearance of No.4, and the question of which of the various types of LMS 2-6-4T No.4 resembled. As a result of this conversation, I decided to try to put together an article tracing the origins of the NCC 2-6-4T design, and how it sprang from the LMS version.

The 18 NCC Jeeps were actually part of a very large family of locomotives. Firstly, there were no fewer than 800 LMS and BR 2-6-4Ts of five distinct classes, as shown in the table below. This total

risers to 818 when the 5ft 3in gauge examples are added. However, the story does not end there since we need to include the 15 NCC Moguls, which were essentially a tender version of the tanks, and by the same logic the 80 BR Class 4 4-6-0s are part of the family as well, since they employ the same boiler (though slightly elongated) as the BR Class 4 2-6-4Ts. All included, this brings the total to 913.

Type	Total Built	Dates	Driving Wheel	Cylinders	Boiler Pressure	Boiler Type
LMS Fowler 2-6-4T	125	1927-34	5'9"	19x26	200	G8AS
NCC W 2-6-0	15	1933-42	6'0"	19x26	200	G8A
LMS Stanier 2-6-4T	37	1934	5'9"	16x26 (3)	200	4C
LMS Stanier 2-6-4T	206	1935-43	5'9"	19x26	200	4C
LMS Fairbairn 2-6-4T	277	1945-51	5'9"	19x26	200	4C
NCC WT 2-6-4T	18	1946-51	6'0"	19x26	200	G8A
BR 4MT 2-6-4T	155	1951-57	5'8"	18x28	225	BR5
BR 4MT 4-6-0	60	1951-57	5'8"	18x28	225	BR4

Our story really begins, nearly sixty years ago, with the formation of the LMS in 1923. As is well known the first six years of the LMS were characterised by the virtual domination of Midland Railway locomotive designs - small 0-6-0s, 4-4-0s and 0-6-0Ts. Before this happened, however, George Hughes, formerly of the Lancashire and Yorkshire Railway, had drafted his proposals for twelve standard outside cylinder designs, which he felt would meet all LMS needs. A Horwich (L&YR) drawing, dated April 1924, showed that these twelve proposed engines included a 2-6-4T.



Hughes "Crab" 2-6-0 No.13069 photographed at Derby in 1934. The proportions of these locomotives make an interesting comparison with NCC 2-6-0s (H.C. Casserley)

Sadly, Hughes was soon overtaken by the advancing tide of Midlandisation, and only one of his proposed designs was actually built. This was what became known as the 'Crab' 2-6-0. Although the mogul was modified in various respects, to fit in with Midland thinking, it still embodied the basic

Hughes concept of an engine which had two outside cylinders, allowing for easy maintenance, a high degree of superheat, and suitable for both passenger and goods traffic. The first Horwich 2-6-0, No.13000, was completed in 1926, and undoubtedly the success of this engine influenced the design of the first Derby 2-6-4T.

The LMS by 1926-7 urgently needed a new efficient suburban tank to replace the ageing ex-LNWR 'Precursor Tank' 4-4-2Ts on the Euston commuter services. Fowler decided to revive the 2-6-4 idea, though on nowhere near the scale of the proposed Hughes 2-6-4T. Hughes had been thinking of an engine with 21" x 28" cylinders, and a massive 4'11¼" boiler, best visualised as a tank version of the 'Crab' 2-6-0. Fowler went for a somewhat smaller locomotive, with a wide route availability, but powerful enough for those heavy commuter trains.

So successful were the first 25 engines (2300-24) that a further 50 were built in 1929. At first glance, the most obvious external differences between the Fowler 2-6-4T and the NCC Jeeps were the inside steam pipes, and the absence of a side window cab on the LMS engines. Both had the G8AS parallel boiler and 19" x 26" outside cylinders. Externally, No.2300 (December 1927) resembled a tank version of the NCC Moguls of 1933, even down to the maroon paint, for the first ten tanks were built before the LMS drastically cut down on the number of passenger locomotives to which the full Midland red was applied. Thus, apart from these early engines, all LMS and NCC 2-6-4Ts were painted black. There was, incidentally, a **named** Jeep. No.2313 (1928) was named "The Prince" until 1933, the only 2-6-4T to receive such a distinction, though most of the NCC 2-6-0s were both named **and** maroon.



Original style Fowler 2-6-4T No.2394 in pristine condition at Derby. June 1933. (H.C. Casserley)

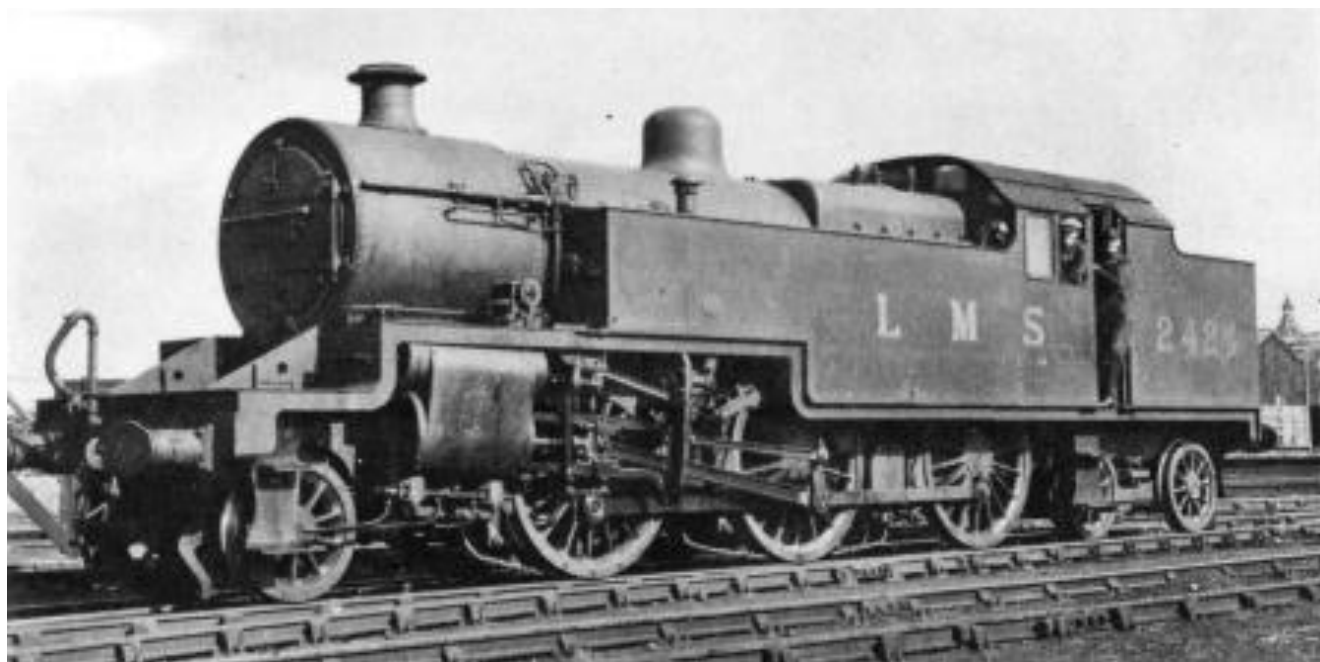
Anyway, to return once more to the Fowler 2-6-4Ts, No.2300 and her sisters had 5'9" driving wheels, and perpetuated one Midland peculiarity. All six-coupled engines designed at Derby between 1874 and 1935 (with the exception of the 4-6-0s and 4-6-2s) had their driving wheels spaced at 8'0" and 8'6". Regardless of engine type, the draughtsman was instructed to lay down first on his clean sheet of drawing paper wheel centre lines at this sacred spacing and to carry on from there. As the reader may have guessed, this same wheel spacing was used on both the NCC Mogul and Jeep designs. No.4 thus has at least one feature dating back to 1874!

At any rate, 1874 wheel spacings or not, the Fowler 2-6-4T was a superb machine, very fast and a free

steamer. In fact it vies with the 'Baby Scot' 4-6-0s for the distinction of being the best Fowler design. This being the case, it seems strange that in 1930, with 75 2-6-4Ts in service, Fowler should have switched to a new and much inferior 2-6-2T design, 70 of which were built in 1930-2. Of Irish interest is the fact that these engines carried the same G6A boiler as the NCC 'whippets' (B3 and A1 4-4-0s).

However, in 1932, a new era was dawning for the LMS (and NCC). In January, William Stanier was appointed Chief Mechanical Engineer, and I am sure it is no coincidence that the two Fowler designs he chose to perpetuate were the 'Baby Scot' 4-6-0s and the 4P 2-6-4Ts. Between 1932 and 1934 Stanier built a further 50 tanks to the design of his predecessor, bringing the total to 125. The last 30 of these (2395-2424) were given side window cabs, and those which were also later fitted with outside steam pipes eventually bore a striking resemblance to the NCC version.

It was at this stage, just as Stanier was taking over, that York Road requested a new mixed traffic engine. It is common to refer to the NCC Mogul as a 'Stanier' design, but this should not be taken too far. Virtually all of Stanier's LMS designs featured a Swindon style taper boiler, in the early days domeless as well. NCC No.90 possessed neither of these features, and in virtually every respect is a Fowler engine. In any case, whilst it is customary to accredit a CME with the design of any locomotive produced during his regime, in practice they usually only sketched the general outline and appearance of an engine, and left the detailed work to their draughtsmen. Considering that in 1932-3 Stanier was closely involved in producing his first Pacific, it is fairly unlikely that he had time to do more than run his eye over the drawings sent up by the Derby draughtsmen and give his seal of approval.



*No.2424 was one of the later Fowler tanks, with side window cab, seen here at Watford in 1937.
(H.C. Casserley)*

The only Stanier feature on No.90 was the boiler top feed. For the rest, a close comparison of drawings for the NCC 2-6-0 and the Fowler 2-6-4T confirms what most people already know - that the former, in almost every detail, is a tender version of the latter. In order to standardise wheel tyres, York Road had requested 6'0" driving wheels and 3'0" pony wheels. (The corresponding LMS figures had been 5'9" and 3'3½".) Apart from this, the Mogul had a slightly modified boiler with 121 small tubes instead of the more usual 146. The firebox, though wider, was, at 7'6", some six inches shorter than on the LMS G8AS boiler.

Leaving these details aside, No.90 had everything else identical to the tanks - cylinders, motion, frames - even chimney and dome were in identical positions. There are three interesting questions raised by the design of the NCC Mogul. Firstly, how close did the NCC come to having a taper boiler design? The four moguls 90 to 93, built to LMS lot No.103, were delivered in July to August 1933. In June 1934 Stanier produced his first taper boiler 2-6-4T, using the new 4C type boiler. Because of the need to facilitate interchangeability of boilers, the NCC continued to use the G8A parallel boiler, even after 1934, for new moguls. Similar considerations dictated that the same boiler be used on the Jeeps after the war, even though the LMS itself had abandoned the parallel boiler twelve years earlier. So did we miss a taper boiler by twelve months? The second question involves the 6'0" driving wheels. Since this was not an LMS size, did their use on the Mogul influence Stanier's plans for the 'Black Five' 4-6-0, which came out with 6'0" wheels? Finally, given the acknowledged success of the NCC engine, why did the LMS not also produce a tender version of the tank? Considering the loads later hauled by the moguls, might they not have been capable of much of the work diagrammed for the Black Fives', and at greater economy?



The derivation of the NCC Moguls from the original Fowler design can be clearly seen in this 1937 photograph of 90, but note the top feed and the styling of the cab. (Loco And General, No.6724)

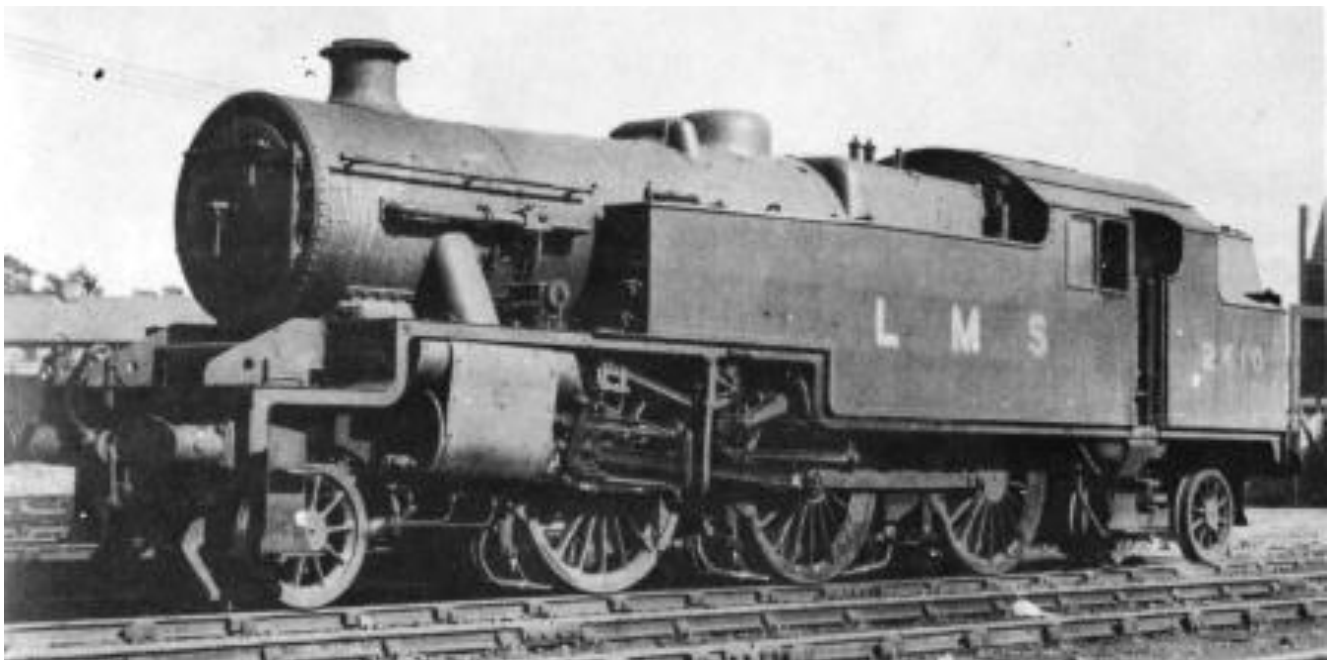
Before coming to the NCC Jeeps, it is essential to briefly trace the evolution of the 2-6-4T between 1934 and 1946. I have already mentioned that Stanier introduced the first taper boiler in June 1934. This was essentially an updated version of the 1927 design. Stanier retained the Fowler chassis (including the wheel spacing!), the 5'9" driving wheels, and probably the same motion. The cylinder diameter was, however, increased to 19⁵/₈". The main modification was the new boiler - now 12'3" between tubeplates, compared with 11'4⁵/₈" on the Fowler and NCC engines. In common with his other early designs, there was not enough superheating - only 12 large tubes, instead of the usual 21, though this was rectified later.

For some reason, Stanier produced his new tank in both 2 and 3 cylinder versions. The 3 cylinder engines, of which there were only 37 (2500-36), were intended for the Tilbury line, but since their 16"

cylinders produced virtually the same power as the conventional two cylinder machines, the 4½ ton extra weight, and more expensive maintenance caused by the extra cylinder would seem to have little point. Stanier certainly appreciated the virtues of 2-6-4Ts, for large numbers of them were built in the late thirties. Firstly, no fewer than 151 were built in 1935-7, shared between Derby and the North British Locomotive Co. (2425-94, 2537-2617). This was the only case of these engines being built at anywhere but Derby, at least in LMS days. These were followed by a further 35 in 1939 (2618-52), and the last 20 (2653-72), ordered in 1939, were delayed by the war (rather like the last six NCC Moguls, 99-104), the last not being completed until 1943.

By the end of 1943 then, the LMS had a fleet of no fewer than 368 2-6-4Ts, and the NCC had 15 2-6-0s. But more change was on the way. In 1944 Stanier left the LMS and was succeeded by C.E. Fairbairn, and in March 1945 Fairbairn produced the third version of the 2-6-4Ts. Since this engine had some influence on the NCC Jeeps it is worth looking at the changes that were made now. In the new design it was principally the chassis that was redesigned. The overall length was reduced to 45'9¾", largely by reducing the driving wheel spacing to 7'7" and 7'9" (sacrilege for Derby). At the front end, Fairbairn left a gap in the running plate ahead of the cylinders, and lowered the buffer beam by several inches (though obviously not the buffers).

Fairbairn retained the 5'9" driving wheels, the 19⁵/₈" x 26" cylinders and the 4C boiler, though the tube layout was again altered. 140 locomotives (2187-2299 and 2673-99) were built at Derby between 1945 and 1948, and a further 137 by BR at Brighton and Derby in 1948-51 (42050-186).



Stanier's taper boiler version of the 2-6-4T is here illustrated by 2610. Also note the redesigned bunker. (H.C. Casserley)

This now sets the scene for the introduction of the NCC Jeeps in 1946. Since, for the reasons outlined earlier, the Jeeps retained the Fowler boiler, and indeed the Fowler chassis, they can in no way be regarded as a 5'3" version of the Fairbairn 2-6-4T. It therefore makes more sense to see in what way the Mogul design of 1933 was updated. The main changes were really at the front end. The Jeeps had outside steam pipes, and their footplating was similar to the Fairbairn engines, with a shallower buffer beam and a gap ahead of the cylinders. The buffers were oval, as opposed to round, and cylinders and piston valves were arranged in such a way as to make the Jeep 3" narrower than the Mogul. Probably

due to thicker tyres, the pony wheels were 3'1" diameter instead of 3'0". The footsteps at cab and front were Fairbairn pattern, rather than Fowler/Stanier.

Close comparison of the drawings reveals three other points. The chimney (now a Stanier one) was placed further forward than on the Mogul, the top feed conversely a few inches back, and the cab was not only further back, but higher as well. It would be interesting to check if No.50 acquired the Mogul features when it received No.99's boiler in 1963.



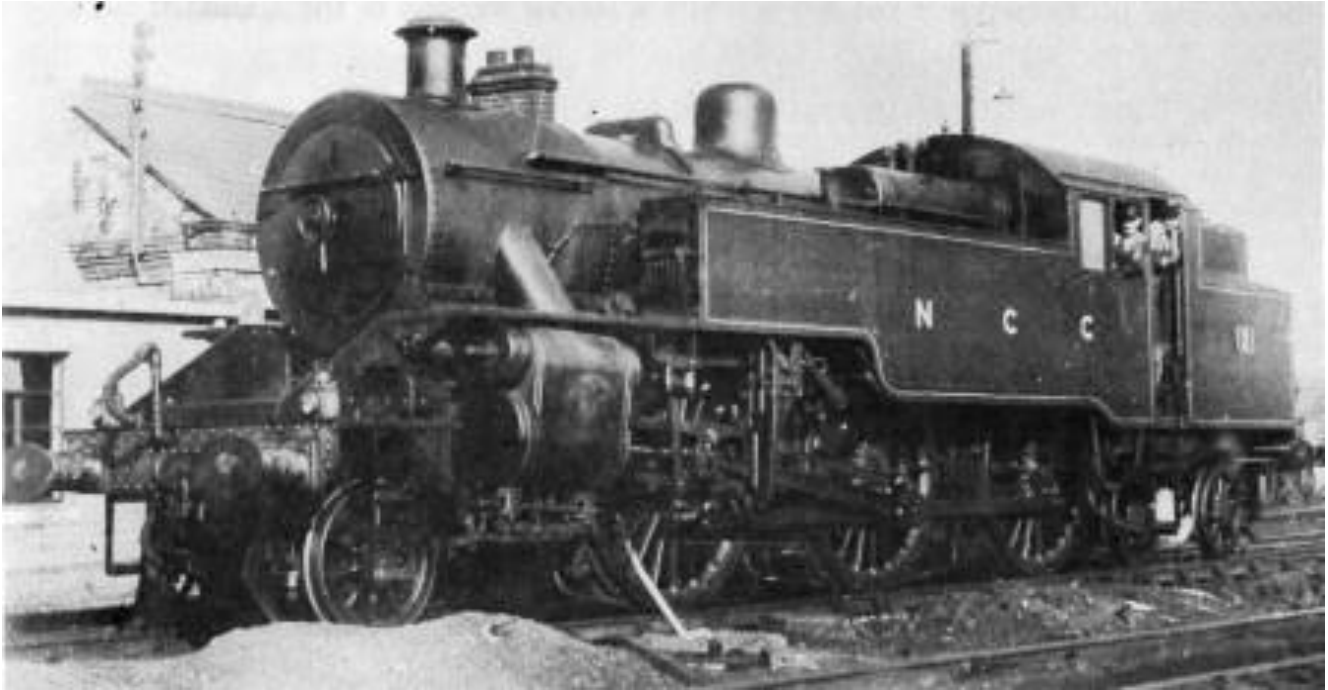
2188 was one of the Fairbairn versions of the design, and is seen here at Low Moor Shed in March 1948. 42085 and 42073 survive on the Lakeside & Haverthwaite Railway. (H.C. Casserley)

Finally, some points of contrast should be made between the LMS and NCC 2-6-4Ts, because the Jeeps differed in a number of ways from their British counterparts. The most obvious was the use of 6'0" driving wheels, and 19" cylinders. Although this reduced the nominal tractive effort, it does not appear to have made that much difference 'on the road'. Certainly the LMS engines never had to face the exacting mainline work that the Jeeps tackled. Secondly, the Jeeps could carry 2,500 gallons of water, compared with only 2,000 gallons in the case of the English tanks, and 1,850 for some of the Fairbairns. Although No.4 and her NCC sisters retained the chassis of the original 1927 Fowler tank, they were only 46'5¾" long, exactly 9" shorter than the LMS engines. This was achieved by moving the back bogie 9" closer to the rear drivers. All the LMS engines had 3'3½" pony and bogie wheels, compared to 3'1" on No.4. Finally, another unusual feature of the NCC engines is the smokebox door handle, a circular wheel with four spokes. This has no counterpart on the LMS itself.

Before concluding, some mention needs to be made of the 155 BR Standard Class 4 2-6-4Ts, built in 1951-7. This final stage in the design was essentially a modification of the Fairbairn engine. The LMS 4C boiler was retained with a few changes, but in order to meet the new universal BR L1 loading gauge, the cylinders were altered to 18" x 28" and the pressure raised from 200lbs to 225lbs, to compensate for the power loss. The Fairbairn chassis was also retained, with driving wheel diameter altered to 5'8". Other changes, such as the footplating, were largely cosmetic.

The Class 4 4-6-0s also used the same boiler, but with the barrel lengthened by 9". Although the main frames were obviously different, the 5'8" wheels, 18" x 28" cylinders and 225lbs pressure made the

4-6-0 really a tender version of the standard tank.



While the NCC Jeeps are clearly derived from the Fowler design, it is interesting to note that many of the cosmetic details follow Fairbairn practice. In particular, look at the footplating, cylinders, buffer beam, footsteps and bunker. (Real Photographs)



The final development of the design was the BR standard version, here illustrated by 80011 at Tunbridge Wells, August 1951. A number of these locomotives ended up in Barry scrapyard and several have since been preserved. (H.C. Casserley)

In conclusion, therefore, the NCC Jeeps were actually unique machines. They had no exact LMS equivalent, but could best be thought of as a Fowler design with Fairbairn modifications. I hope this article throws some light on their history. I would like, lastly, to acknowledge help given by Mr J.H.

Houston in clarifying some points in relation to this article, and express thanks to NIR York Road for making available copies of their Mogul and Jeep diagrams.

LETTERS TO THE EDITOR

Dear Sir,

Reading the recent issue of "Five Foot Three", containing the request for views on the future of the publication, may I suggest that my views on two aspects which appear relevant would be of interest.

1. The two principal Societies in Ireland are the RPSI, primarily concerned with operating, and the IRRS, concerned with recording past history and present development. One might therefore expect that the RPSI would circulate details of its current activities and plans for the future, while the IRRS would deal with reminiscences and recording history.
2. What is the cost of producing one or two "Five Foot Three"s in their present form? Do sales at functions and on trains encourage new members to join? Present trends in costs, and the economic position, would indicate a great need to devote all funds to operating. If the present "Five Foot Three" is a drain, perhaps an expanded, duplicated circular twice a year would keep members informed and result in more money being available for the increasing amount of work which will be needed to the stock.

Yours faithfully,

H.C.S. Beaumont



No.93 "The Foyle" seen shortly after being named in 1936. Note the polished steel smokebox door straps and edging. (Loco & General 6727)

Dear Sir,

I write in response to your request, in the current edition of "Five Foot Three", for members' views on the railtour programme.

The most obvious defect in the programme each year is the unfair bias towards tours in and around Belfast to the prejudice of people living in the Irish Republic, and indeed those living on the UK mainland.

I try and go over each year for the 2 day tour from Dublin, sometimes to travel on it and other years to chase, but when this tour is over, usually in mid-May, there is usually no other tour for the rest of the year originating in the Irish Republic. With all the violence and political unrest in Northern Ireland there is no way I would go there or even anywhere near the border, so in practice mid-May sees the end of my interest in events for another 12 months. I am sure a lot of other mainland-based enthusiasts must be equally disappointed by this, and if I were living in the Irish Republic, I would be livid. About two-thirds of the population live south of the border, yet a Society which claims to represent the **whole** of Ireland only starts 1 or 2 of its tours there out of 12 or 15 in the year.

Yours faithfully,

R.P. Turnbull

[While the opinions expressed in the foregoing are no doubt sincere ones, I feel that the following comments should be made:

- 1. Tours must be within the resources of our manpower and operating staff.*
- 2. Tours must at least cover their costs.*

*The present railtour programme is evolved from these criteria. The **only** enthusiast orientated trip now run is the 2 day tour. I frankly doubt if there would be sufficient demand for more than one of these per year, and it would also be outside our manpower resources. The other trips are all public orientated. As the Society's main base is in Whitehead, and as the majority of its members are in the North, it seems logical to operate trains from there.*

Until recent years there was little interest in practical preservation in the South. In response to the interest shown by a group of Southern members, the Society has developed Mullingar as a second base. In addition to the 2 day tour, the Society runs one day public trips from Dublin to Bray and Howth., the "Claddagh" and "Shannon" railtours, and the Christmas and Easter trains. The last one day enthusiast orientated tour in the South, to Port Laoise in 1980, had to be cancelled due to lack of support. Would enthusiasts come from England for one day events?

Violence in the North is used so often as an excuse for so many things. It is often said, but true, that 99.9% of life goes on as normal. Increasing numbers of cross-channel participants have been travelling on our trains in the North and I have yet to hear of anyone who has felt intimidated by, let alone been involved in, any of the political unrest. - Ed.]

Dear Editor,

Five Foot Three - Spring 1982

May I be permitted a few inches of space to comment on two or three items which appeared in the last issue of "Five Foot Three"?

1. Page 20: The train shown is entering the then Amiens Street station, not Dundalk as stated in the caption. Note the DSER coach to the left of the locomotive; this vehicle is in the carriage sidings of

the Loop Line side of the station. The train which 192 is bringing into Dublin is very probably the 8:15 (or thereabouts - departure time varied slightly from time to time) from Belfast. This was the only main line through train in the twenties and early thirties, on weekdays, regularly rostered to be worked ex-Belfast right through to Dublin by a Belfast engine and enginemmen. All other Up trains, except the Mail, to which I refer below, were worked by Dublin locos and crews.

2. Page 24: The 6:40pm (18:40) Dublin-Belfast train, which gave a connection from the day English Mail service via Holyhead and Dun Laoghaire, was worked by a Dundalk engine and crew from Dublin to Dundalk, where engines were changed and the Belfast loco and set of men which had worked the Up Mail as far as Dundalk (leaving Belfast at 05:30 in those pre-strike, pre-compound days) took over the running forward to Belfast. Dr. Read noted in his article that 190 "must have taken over at some stage of the journey". Dundalk was where this would have happened. So QL 127 cannot be credited with the timings noted for the northern half of the journey. At the time of which Dr. Read is writing, the S Class were in Dublin and the S2 in Belfast. Hence the use of 192 and 190 on the 8:15 ex-Belfast and the working to which I have just referred.
3. Page 24: The picture shows U Class 200 with a through Dublin-Enniskillen coach (off the 9:00 Down, to judge by the position of the shadows), which will be added to the front of the Down Irish North set.
4. Page 26: Apropos Dr. Read's claim that the NBR Atlantics were descended from WLWR locos, he states "No documents have come to light to show the design (Robinson's GC Atlantic design) was copied". However, on page 194 of Hamilton Ellis's "The North British Railway" the author refers to the GC ancestry of the NB locos via the North British Locomotive Company, and states "Robinson's GC drawings were found very useful".

Yours sincerely,

Laurence Liddle



VS 210 "Erne" waits to leave Amiens Street on a Down express on 21st May 1956. The three K15s on the train will be the envy of many at Whitehead. (Kelland Collection No.101)



Returning from Multyfarnham, No.184 and train pass Lake level crossing at the south end of Lough Owel. (C.P. Friel)