Far North Express

FoFNL

The Friends of the Far North Line

Issue 87
September 2022

The Magazine of the Friends of the Far North Line

For news and views about rail in the North of Scotland

Cairdean Na Loine Tuath

£3.00

Contents

www.fofnl.org.uk/fne/cps/fne87.html is a companion page with some web links and larger versions of pictures found in this issue. This sign on a page denotes available material: *www*

Articles in *Far North Express* are attributed, except for 'news' items, and do not necessarily reflect the views of the committee. Some columnists use a pseudonym.

Website: www.fofnl.org.uk
Facebook: www.facebook.com/fofnl
E-mail: editor@fofnl.org.uk

Editorial Address:
3 Villafield Loan,
Bishopbriggs,
Glasgow , G64 3NZ

Far North Express is published in January, May and September

Cover Photo: Portent of good things to come: On 30 August 2020 66591 is heading a new track construction train at Clunes. This is at the other end of the former double track section of the FNL from where the Delmore Loop is to be constructed near Clachnaharry, opening in 2024.

Photo: **Sandy Colley**

Important Note to Our Members

Our Treasurer, David Start, has requested that we make sure to fill in the 'reference' box on **all** bank transactions. The ideal format would be **full name + membership number.**

If we don't do it ourselves the bank generates a reference, and data protection legislation prevents the bank from being allowed to inform David to which name the reference is attached. This can cause confusion when two or more members share a surname.

Headcode

www

As UK residents we are fortunate to be living in Scotland where there is much less of an "every man for himself" culture and a realisation that we live much more happily when we share the cost of vital things.

The very fact that anyone came up with a policy in England to be called "Levelling Up" is recognition that things in that country are far from level, and the angle of the incline between the South East and the rest of the country has been increasing substantially in recent years. This has been a serious failing on the part of the UK Government.

However, when viewed through the prism of public transport in the Highlands it is clear that in Scotland we have our own version of that incline. To some degree this is unsurprising, since it is a brave accountant who doesn't try and justify everything in terms of 'value for money', and of course in transport that has meant you needed to measure the number of people who will directly benefit, and opt for projects which match that prerequisite.

The key here is "directly benefit" and when it comes to public transport that can be misleading. Having a good infrastructure which provides excellent service to *all* residents, visitors and freight operators raises the standard of the whole country, making it a far more desirable place to live.

Fortunately the idea of 'value for money' is changing in terms of what 'value' we are seeking. This is spelt out in Transport Scotland's *Scottish Rail Holdings Framework Agreement and Financial Memorandum*. Within this document is the *Rail Services Post 2022 Policy Compendium* which is "a collection of policies to guide and empower ScotRail Holdings Ltd and ScotRail Trains Ltd in the delivery of rail services on behalf of the Scottish Ministers." Quoted in the Compendium is the 2018 *Rail Enhancements and Capital Investment Strategy* (RECIS) which contains the phrase, "optimise value for money in terms of economic, social and environmental benefits". This clearly liberates planners from the constraints of population counting and encourages them to take a Scotland-wide view.

What we need now is for planners to take a good look at how far behind Highland railways have fallen, and do what it takes for them to catch up. The current projects on the Far North Line are a fine beginning to the process but there is a very long way to go. We look forward to the implementation of the "Helmsdale Hub" recast of FNL services, and future investment in extra passing loops to give timetable resilience as well as offering new possibilities for both passengers and freight.

Ian Budd

New Subscription Rates

It was decided at the AGM to simplify and increase our membership rates. The current increases in the cost of everything mean that our rates have fallen behind many comparable organisations.

From January 2023:

Annual membership paid by Standing Order or PayPal automatic payments	**£15.00**
Membership for a single year	**£18.00**
Life membership	**£120.00**

Previously held corporate memberships will be converted to the ordinary rates.

If you are a member who currently pays by Standing Order, or PayPal automatic payments, you will need to **notify your bank or PayPal** in time for the payment which is going out on or after 1 January 2023 to be increased.

If you do not do this online you will need to complete and send the enclosed form **directly to your bank**.

AGM 2022 - Convener's Report

My first thought as I write this is that we don't seem to have progressed much in the last three years. We're still waiting for completion of all the improvements agreed by the Far North Line Review Team in 2019, but things are happening, many of them are in place and others are part of the way through deployment. We are also expecting good news very soon about the major item, the new passing loop near Inverness. We had always referred to it as the Lentran Loop, but it has been decided to place it much nearer the southern end of the line, and it will now be known as the Delmore Loop, a name requested by FoFNL to reflect its geographical location.

The pandemic slowed development work down quite dramatically, and had other effects on the railway too, not least in bringing to a halt the recruitment and training of drivers to remove the need for rest day working - something we're all too aware of right now with our services temporarily cut by more than 50% when drivers became unwilling to work on those days during pay negotiations.

The Far North Line did run a full service right through the pandemic, but like all railways carried few passengers. Services on the line have continued to be plagued by train faults. A major cause of these is, rather surprisingly, problems with the newly refurbished Inter7City HST units. Stock availability has often reached low levels, with many trains out of action. The HSTs are having many problems, some to do with the different kind of service they are providing compared with their past lives, e.g. more stopping and starting on inclines in bad weather, resulting in wheelflats. Drivers are having to learn from experience how to handle the trains in these conditions. Whenever one of them fails, alternative stock has to be found from somewhere, and this means that our units have sometimes been forced to miss routine maintenance appointments. Given their age, it's hardly surprising that the 158s develop faults between examinations, causing sudden withdrawal from service.

Good news on the freight front: A very pleasing development is the decision, after a successful trial in 2020, to provide a timber loading area next to Altnabreac Station. The trial used the familiar pipe wagons, but dedicated timber wagons are being procured and a regular service is expected to begin quite soon. Initially it will run for six months, but the signs are good that it will continue. It is excellent to see the line being used for freight and we're hoping to see significantly more of this in the future. I attended a freight conference at Mossend in November and the atmosphere there was extremely optimistic with rail being ready to fill gaps left by the struggling road haulage industry. The railfreight industry has some innovative plans targeting expanding markets such as parcels traffic.

In January Transport Scotland published the *Strategic Transport Projects Review 2 Draft Report*, which was followed by a kind of feedback questionnaire for stakeholders and individuals. As you will have seen in *Far North Express*, the long-awaited report did not fill us with joy as it contained very little in the way of definite plans, or even intentions in its 190 pages. It is mostly concerned with assembling statistics and matching general transport aspirations with government policy bullet points. FoFNL had to respond, and we used the questionnaire supplied but also had to attach a covering document since it was not possible to match our views with the way the questions were framed. Many of the questions were reminiscent of those commercial competitions which you win by guessing the correct order of a product's attributes. In fact it was often the case that two or three items in a list seemed equally important and the rest equally unimportant, or sometimes actually wrong. This is something which cannot be conveyed by order of preference, and in fact when aggregated may lead to a completely incorrect assessment of opinions.

Most recently, members of the FoFNL Committee carried out the onerous, but necessary FNL Station Survey. This is done every five years or so, and covers all aspects of all the stations on the line from the point of view of passengers and prospective passengers. The

findings are passed on to ScotRail and Network Rail who have responded well in the past - they're just as keen for things to be right as we are!

In the latest edition of *FNE* we listed our current aims. These include another passing loop somewhere at the northern end of the line, as well as consideration of providing an all-day shuttle service between Thurso and Wick. We'd also like to see a better arrangement near Georgemas Junction with the addition of a chord to allow trains to travel directly to and from Thurso without reversing. If a new station were to be built at Halkirk it would be possible for alternate trains to terminate at one of the two termini, the passengers for the other being picked up by the shuttle train.

A major issue of concern for us, which is reflected in the station survey, is the lack of an integrated transport system where switching modes is easy and journey planning assisted by full information and through ticketing. A passenger alighting from a train at most Far North Line stations will not be able to find out whether, where or when there are buses to complete their journey. This is largely the result of a history in the UK of allowing unregulated bus services to operate completely independently of the rail system. If we are going to achieve modal shift this is an area that the government needs to focus on. I think much can be learned from countries, such as Switzerland, which don't seem to find it a problem.

In general terms I remain optimistic about the future, as long as the politicians are able to overcome their fear of the electorate and get down to implementing the Scottish Government's policy of modal shift away from road transport. Its stated aim of a 20% reduction in car use will roughly double the number of passengers on Scottish railways. There is a very short time remaining to build in the extra capacity needed, so we need construction, not reports. However, the current economic conditions are worrying, so we need to make the case for rail even more strongly and keep it at the forefront of politicians' minds.

Ian Budd – FoFNL Convener – 17 June 2022

This report was given at our 2022 AGM

2022 AGM & Conference Report

On Friday 17 June we managed to have our AGM & Conference live for the first time since 2019's event in Brora.

Having chosen Dingwall for our 2020 event, in recognition of Kate Forbes' agreement to address the conference in her home town, we faced a difficulty in that the Ross County Football Stadium which was the original venue had not reopened to events after Covid.

Research uncovered the fact that the National Hotel in Dingwall, which is very near the station, was under new ownership. The hotel had been in decline for some years so it was very good news that a small team of young owners had taken it on. They have only been in charge since March this year and have already transformed the restaurant and bar, and are now working on the rest of the hotel.

Not everything went according to plan however. Scottish train drivers had begun an unofficial withdrawal of overtime and rest-day working in May which had led to a drastically reduced service on the Far North Line. With fewer than half of the services operating it was inevitable that many attendees, including our speakers, would be unable to arrive by train. The Network Rail speaker became stranded at Invergordon and had to arrive by taxi and the *Modern Railways* Editor had to get a bus from Inverness.

We were however very pleased with the attendance, which was a lot higher than in Brora in 2019, in spite of the travel difficulties.

The day began with our AGM. The office holders submitted reports and the usual voting activity took place. We were sad to note that David Spaven did not stand for re-election to the Executive Committee. David's extensive knowledge will not be lost to us though, as he has rashly agreed to be contacted for info when needed! We are glad to welcome a new committee member, Richard Mansfield of Inverness, who has recently retired from the British Transport Police. Richard brings a wide experience in railway matters from a different

angle, much of it to do with safety. We're looking forward to his input in future.

The meeting voted to increase our annual subscription which had been static for a number of years, details on page 3.

The conference began with a welcome speech by our President, Jamie Stone MP. A keen supporter of rail travel, he emphasised the value of FoFNL and the importance of rail provision in the Highlands.

He was followed by Matt Powell, Head of Sponsorship at Network Rail. Matt was indeed the bringer of good news as he was able to announce confirmation that detailed planning work for the new passing loop near Inverness has begun, with it being brought into use in 2024. The loop will be known as the Delmore Loop, a title reflecting its location just west of Clachnaharry. For many years FoFNL has been campaigning for a "Lentran Loop" but when an operational needs investigation was carried out it was decided that the loop would be more useful much nearer Inverness. The loop will help to reduce the build-up of delays caused by any late running on the busy section of route shared with the Kyle Line. This, along with the change from train-operated to radio controlled motorised points, is a vital step in improving the reliability of the railway.

Matt also presented a video which gave us a detailed look at the new 'Request to Stop' equipment that is being brought into use on the line. The operational advantages are clear, and the system pioneered here at the suggestion of Frank Roach of HITRANS will probably be replicated elsewhere.

Our second speaker was Kate Forbes MSP, Cabinet Secretary for Finance and the Economy (the Scottish equivalent of Chancellor of the Exchequer). Kate is the constituency MSP for Skye, Lochaber and Badenoch which includes Dingwall where she was born.

Kate gave a very enthusiastic view of rail, especially in the Highlands, and it was obvious that she and we are mostly on the same page about what needs to be done. We do differ on the specific question of priorities between road and rail, especially on the question of dualling the A9 and A96. This was a chance for us to make the point that the essential capacity issues on the parallel railway routes should be addressed before spending money on fully dualling the roads.

During lunch we discovered that David Simpson, ScotRail Service Delivery Director, who was the only speaker travelling by train, had had to turn back due to a family health emergency (which thankfully turned out to be a false alarm). Fortunately we had his slide presentation on our laptop and he emailed some notes from the train to be read out whilst showing the slides. This worked up to a point, but did not adequately convey David's enthusiasm for the future of the railway in public ownership. His view is that long term planning now becomes much easier without the fixed term franchise system, and the opportunity to incorporate expertise from staff throughout the organisation will improve the quality of rail provision in Scotland.

Our final guest speaker was Phil Sherratt, Editor of *Modern Railways* magazine. He gave a view from 'down south' of Scotland's Railway, which made us feel glad to be here, not there! There isn't even a rolling programme of electrification from the DfT, which is extraordinary considering the urgent need to remove diesel traction. Phil's enthusiasm for rail in general and Scottish rail in particular was infectious and a reminder of why *Modern Railways* is such a good read. Phil gave his trip excellent coverage in the editorial of the August issue of MR in which he mentioned that he was reprimanded by a couple of attendees for being too positive!

The conference ended as always with Frank Roach bringing us up to date on various issues affecting the line.

Some of us then headed straight up to Helmsdale (unfortunately by car as there was no suitable train) to enjoy the two-day event organised by Mike Willmot to mark the 150th+1 anniversary of the opening of the Duke of Sutherland's Railway in 1871. The pandemic had comprehensively wrecked all the original celebration plans which would have seen our 2021 AGM & Conference being held in Timespan in Helmsdale, followed by Mike's event in the same place, however we were committed to Dingwall, as originally planned for 2020.

Ian Budd

FoFNL was delighted to welcome ***Phil Sherratt****, editor,* Modern Railways, *to speak at our AGM & Conference in June. He very kindly covered his experience in the editorial of the August edition.*

I always enjoy a trip to Scotland, and June, when the days are at their longest, is arguably the best time of year to venture north of the border.

So it was for me as I headed to the Friends of the Far North Line's annual conference in Dingwall in mid-June, where I was one of the speakers. Fresh from hearing Transport Secretary Grant Shapps deliver a speech at Hornsey depot urging RMT union members not to take strike action, I hopped down to King's Cross to join LNER's *Highland Chieftain* Azuma for the full trip to Inverness.

There is always something special about these epic journeys — the *Chieftain* weighs in at 581 miles and around eight hours and is the longest through day train from London. It is always a popular train, and the volume of people with heavy luggage queueing up to board on platform 8 at King's Cross was testament to that.

This is a journey which simply gets better as you head north - the majestic sight of the cathedral and castle at Durham, the Angel of the North, crossing the Tyne into Newcastle and then the run along the coast through Northumberland and into Scotland.

A good number of people alighted at Edinburgh, where there was a significant churn of passengers, highlighting that the *Chieftain* is well-used as part of the regular service pattern on both sides of the Scottish capital. But a very significant number of people were making cross-Edinburgh journeys. One Twitter correspondent suggested the current penchant for cutting back one-off workings (such as GWR's Great Malvern to Brighton service or SWR's services to Bristol) might extend to the *Chieftain* To me this would seem undesirable from a commercial perspective but also politically unacceptable; hotels in Inverness are reportedly accustomed to guests checking out in time for the 07:55 departure of the King's Cross service.

The journey north from Edinburgh to Inverness isn't the fastest, but it does allow ample time to appreciate the splendid scenery of the Highland Main Line while enjoying the excellent hospitality provided by the LNER crew.

A prominent topic at the conference the next day was the Scottish Government's commitment to dual the A9 road while the adjacent railway still languishes with long sections of single track. For the Scottish Government, Cabinet Secretary for Finance and the Economy Kate Forbes, who is the MSP for Skye, Lochaber and Badenoch, told the conference she supports the A9 project as much for improving safety as improving reliability, and said the Scottish Government would like to do both, although the current financial circumstances are clearly challenging.

It is somewhat unfortunate that ScotRail's dispute with ASLEF which caused cuts to the timetable meant there was no suitable train from Inverness for me on the morning of the conference. So I joined other attendees boarding the 10:00 bus to Dingwall - although the disappointment was eased by the enjoyment of the spectacular crossing of the Beauly Firth over Kessock bridge. Of course, industrial relations difficulties are not an issue exclusive to Scotland right now.

FoFNL is a very active and supportive user group, and it was fascinating to hear both about the group's ambitions and about Network Rail's plans for the line. The group is assisted greatly by the support of the Highlands and Islands Transport Partnership (HITRANS), whose Partnership Officer Frank Roach is a fantastic advocate for public transport improvements in the region, with many imaginative and ambitious schemes on the go - much more on that in our Scottish issue later this year.

In my presentation covering my own perspective on Scotland's railway, I highlighted the fact there seems to be a far more focused vision than south of the border, although a couple of attendees did reprimand me for being too positive! But as I retraced my steps on the busy *Chieftain* the next day, I reflected on the shared ambition and collective will for improvement — there is a lot of work to do, but there is cause for optimism too.

Celebrating the Duke's Railway

Following on from FoFNL's meeting on Friday 17 June was the event at Timespan in Helmsdale organised by Mike Willmot to celebrate the 150th Anniversary of the opening of the Duke of Sutherland's Railway.

This was a most enjoyable occasion and gave the author a chance to establish or renew several acquaintances. The talks on the Saturday were most entertaining - I'd never imagined how interesting concrete construction could be!

Ian Budd

Mike issued this press release describing the event:

Some 50 people converged on Timespan in Helmsdale last Friday and Saturday to mark the anniversary of one of the most extraordinary chapters in the history of railway construction.

When the Sutherland Railway Company ran out of money as the line from the south reached Golspie, the third Duke of Sutherland agreed to finance from his personal resources the line through the northern part of his estate. Employment was offered to estate inhabitants to construct the 17 miles of track through to Helmsdale. When it was officially opened on September 17th 1870 by Princess Christian, the Duke himself was on the footplate driving his personal locomotive, Dunrobin. At this stage the line was not connected to the rest of the network and the engine and carriage had to be hauled by traction engine across a mile of muddy track – the gap which remained at Golspie.

The line was fully opened when the connection at Golspie was established on 16th May 1871. The 150th anniversary (a year late because of Covid) was marked by a performance of local folk and railway-related songs in Timespan on Friday evening, with talks about various aspects of the construction and associated developments along the line on the Saturday morning. Speakers included the railway author and Highland Railway expert, Keith Fenwick; Brora historian, Dr Nick Lindsay; and nineteenth century concrete buildings authority, David Scott-Cowan. The session was chaired by ScotRail Honorary Rail Ambassador, John Yellowlees.

On Saturday afternoon some 25 people made a trip along the line to Dunrobin Castle where there was an opportunity to see photographs and memorabilia relating to the construction in the Castle. An eight page line guide to the Duke's Railway was published to mark the anniversary event. Electronic and printed copies are available from helmsdalestation@gmail.com

On return to Helmsdale an afternoon tea was provided in the station building at Helmsdale. Those attending included several retired railway employees who were able to recall a time when every station was staffed. Included in this number was Donald Stuart [see page 34], the last stationmaster at Kildonan and Anne Sinclair who worked in the station office at Helmsdale administering the payroll for almost 100 railway workers.

The anniversary event not only recalled the line's construction and past operation but looked to the future. David Watson, Trust Manager, Kyle of Sutherland Development Trust and Chair of the Far North Line Community Rail Partnership (its application for CRP status is currently being considered by Transport Scotland) spoke of the importance of involving local volunteers and local communities in promoting the line jointly with all the attractions and amenities it led to, in order to boost tourism, secure the viability of the route and contribute to the local economy. Ian Budd, Convener of the Friends of the Far North Line spoke of the work of the Friends in campaigning on behalf of the line to ensure this attractive route serving many remote communities, an environmentally friendly form of transport, survives and is improved for the years to come.

Pandora

When he was a little boy Pandora was much delighted by the story of the Magic Porridge Pot which, through an agency never made quite clear, poured forth unlimited amounts of porridge. Now that he is older Pandora can see that this story needs to be taken with more than a pinch of salt. Would that the guiding minds in the British railway were so alert to the tricky bits of delivering an infinite quantity of good things without working out quite how.

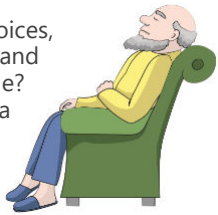
A year ago Pandora looked at the different energy densities of various competing fuels: electricity, diesel, battery and hydrogen. The inescapable conclusion - purely from an energy delivery standpoint, and ignoring cost - was, and remains, that electricity and diesel are vastly more efficient than the new trendy kinds. Diesel will soon be taboo, leaving electricity as the only source of powering the bulk of trains - long-distance expresses and all freight. Shortish lines can get by with some hybrid solution, but these form a small percentage of the total track miles. None of this is new to Pandora's readers.

Pandora Returns to Physics O-Level

This is the easy bit: make sure that an unlimited amount of electricity appears (and while we're at it, make sure that an unlimited supply of all the fancy new stuff needed for batteries appears as well. The hydrogen is easy - you just stick some electricity into a bowl of water and...but that merely adds to the amount of electricity needed, so we need an even bigger amount of electricity than we first thought of). Let's forget all the rare earths and metals sourced from unfriendly places, as Pandora allows himself to get worried by only one thing at a time.

Add up all the electricity generated. X% will be used in industrial processes; Y% used by people in their homes; Z% used by existing transport concerns (mainly trains, but also some buses, trams and goods vehicles). Pandora does not know the values for X, Y and Z, but thinks it unlikely that X and Y will alter much as time passes, though neither is likely to fall as other fuels for industry and domestic purposes will be reduced. Z will increase greatly. This can have only one result: all the electricity currently generated will be insufficient. And all that is before we consider the unknown unknown: the wholly extra Q% which will be required to power all those electric cars.

Here is the rock: the need to generate at least a further Z% within the next 15 to 20 years. The hard place is that there is no Magic Porridge Pot other than the One Whose Name Cannot Be Mentioned. Covering the land with windmills or solar panels will not do the job as the amount of land take which is likely to be acceptable is nothing like enough, and each introduces the additional problem of storage for when the wind doesn't blow or the sun doesn't shine. Pandora would not wish to see the tabloid newspapers with headlines blaming the lack of trains on the wrong kind of sunshine.



There's no getting away from it, is there? When faced with two choices, neither of them agreeable, the only solution is to accept the less (and here it's necessary to insert a negative adjective: disagreeable? dangerous? unpopular?) one. The clever thing will be to find a positive adjective instead. If we are to carry out the policy of decarbonising rail transport we must build more nuclear power stations. Plural. And soon. For they are the nearest things to a magic porridge pot.

Request to Stop

Photos: Network Rail

On 9 August Network Rail issued a press release announcing the beginning of the trial at Scotscalder of the Far North Line Review Team's *Request to Stop* system, devised by Frank Roach of HITRANS. The equipment became operational on Monday 15 August.

This is part of a £5m package of investment in the line's radio signalling system (RETB) which will achieve several other benefits to speed and reliability. Network Rail has upgraded existing radio communication masts and antennas and installed new equipment at Muir of Ord, Invergordon, Kildonan and Wick stations to enhance radio coverage.

The Scotscalder trial is being closely monitored to ensure safety and reliability, and a period of dual running is in place to make sure the new system is fully working.

Early indications are good, and a Network Rail spokesman said, "The trial is going positively with the system being well received by passengers, drivers and signallers, and it is all building towards proving its functionality to enable the rollout at further Request to Stop stations later this year."

David Simpson, ScotRail Service Delivery Director, said: "This will improve performance and it's a really positive step for the operation of the route."

ScotRail Tender Notice for Legal Services 5 August 2022. This is a useful description of the current position regarding the procurement of new trains as part of the decarbonisation action plan.

ScotRail Trains (SRT) plans to replace 65% of its train fleet (around 675 carriages) in the period 2027 to 2035. Nine of the eleven sub fleets of trains currently operated will be replaced as leases expire and it becomes uneconomical to life extend trains for continued operation. As part of this programme SRT will decarbonise our entire train fleet helping Scottish Government deliver a key milestone in transitioning Scotland to a net zero economy. All existing diesel trains will be withdrawn and replaced with new trains powered by overhead electric wires, batteries or hydrogen. As well as eliminating carbon emissions from passenger rail services in Scotland, this will transform our customer offer improving journey comfort, accessibility and reliability. We will reduce operating costs and improve the consistency of offer to customers by consolidating the number of different sub fleets we operate from the existing eleven to, ideally, five.

This transformation will be delivered through three procurement competitions:

- Phase 1 2022-23 - we will procure a new fleet of suburban trains which will enter passenger service between 2027 and 2030. These trains will connect local communities with Edinburgh, Glasgow, Perth, Dundee and Aberdeen.

- Phase 2 2024-25 (indicative) we will procure a new fleet of trains for our rural routes.

- Phase 3 2025-26 (indicative) we will procure a new fleet of intercity trains to connect the central belt with Aberdeen and Inverness.

SRT require legal advice services to support us in running efficient and compliant procurement competitions which deliver trains which meet our customer, technical and operational requirements whilst providing value for money for the taxpayer. Value for money extends beyond the capital and operating cost of the new trains to include the economic and societal benefits which can be delivered for local communities and businesses through such significant investment from Scottish Government. Ensuring the new trains are constructed in a manner which minimises the impact on the environment will also be a key factor in delivering a successful sustainable procurement.

The first phase of the new trains programme will be to procure a new fleet of suburban electric and battery electric multiple units (EMU and BEMU). Including options, the suburban procurement is envisaged to cover around 120 units comprising around 550 vehicles. We envisage the minimum core order being 64 units and 295 vehicles.

The scope of the procurement will also include Maintenance services – tenderers will be required to submit options for both a Technical Services Agreement and Technical Support and Spares Supply Agreement and a decision on the route which provides best overall value for money will be taken prior to contract award.

Upgrades will be required to maintenance depot and servicing and stabling facilities. These are likely to be delivered by our partners in Network Rail, but we will investigate during the procurement if there is benefit in works being delivered by the train Manufacturer and Maintainer.

A separate procurement is anticipated be held in parallel with that of the trains to identify a suitable financier.

Following contract awards on the suburban trains procurement, it is envisaged that the team will move onto developing and delivering procurements for the rural and intercity fleets.

The legal advisors will be required to provide ad hoc contract management and legal support to the SRT project team managing the design, manufacture, testing, commissioning and approvals process of the new trains contracts.

74% of the Far North Line Should Probably Have Hydrogen Trains

By **David Shirres**, Editor
RailEngineer Magazine

Artist's impression of UK hydrogen train

For most rail services, there is only one decarbonisation solution. As Transport Scotland's Bill Reeve is often heard to say, "In Scotland, we spell decarbonisation E-L-E-C-T-R-I-F-Y."

There are sound reasons for this quip. Railway electrification is the only proven zero-carbon high-powered transport technology. Electric trains use electricity as it is generated and return it to the grid when braking. The power of electric trains is only limited by the current that can be passed from wire to pantograph and the thermal capacity of their traction motors.

In contrast, the power of self-powered trains is limited by their heavy on-board power plant. They also require on-board energy storage which involves inefficient energy conversions. This is not an issue for electric trains which are more efficient, powerful, and lighter than self-powered traction as well as being cheaper to buy, operate and maintain.

Electrification therefore offers significant financial and operational benefits. Electric traction offers the high acceleration needed for high-capacity metro services and heavy freight trains with acceptable performance on a mixed traffic railway and is the only way of powering very high-speed trains.

Its disadvantage is that it is expensive but, in some cases, much more than it need be. Moreover, decision makers focus on the *cost* of electrification rather than its benefits. As a result, the UK has comparatively little electrification and so has one of the world's worst railway carbon records. It probably operates the world's most intensive diesel inter-city service and 97% of the energy used by rail freight is from diesel.

Scotland gets it

Unfortunately, there is little sign that the UK Government understands that a rolling electrification programme is needed if it is to decarbonise its railways. As an example, the response to a Parliamentary question asking why the new East-West rail line is not being electrified as it is built was that this enables a wider range of green energy technologies to replace diesel trains to be explored.

In contrast, Scotland is the only part of the UK that is actually implementing a plan to decarbonise its railways with a rolling electrification programme. This is being done, not just because decarbonisation is the right thing to do, but because it provides a more cost-effective, reliable, and higher performing railway. As a result, more passenger and freight customers will be attracted to rail as required by the Scottish Government's overall decarbonisation plan.

Scotland's Rail Services Decarbonisation Action Plan envisages the elimination of diesel passenger trains by 2035. Thus, by then alternative zero-carbon trains should be operating on the Far North Line. By 2045 the plan is that all Scottish lines will be electrified apart from: Girvan to Stranraer; Craigendoran to Oban and Mallaig, Dingwall to Kyle of Lochalsh and Tain to Thurso and Wick. Thus, interestingly Transport Scotland considers that, there is likely to be a case for electrification from Inverness to Tain. Yet with less frequent services, the remaining 74% of the Far North Line will require a self-powered alternative to diesel traction.

Weaning transport off fossil fuels

Since 1990 the UK has reduced its carbon emissions by 44%. Thus it could be thought that the UK is on target to achieve its target of net-zero carbon emissions by 2050, yet this is not the case. Whilst there has been a 66% reduction in emissions from power generation, there has only been a respective 5% and 15% reduction in transport and residential emissions which between them account for 43% of UK emissions as both these sectors are heavily dependent on gas and liquid fossil fuels. The issue is that nothing else comes close to the amount of energy that can be stored in easily transportable fossil fuels unless a nuclear-powered train is feasible.

In respect of energy density, hydrogen is the closest practically available substance to petroleum. This can be stored as a compressed gas, as a liquid when super-cooled, or in ammonia. Liquid hydrogen fuel has been used for space rockets and is being considered by Airbus for zero-carbon planes. Ammonia is being considered for zero-carbon ships. The table below compares energy storage of hydrogen and batteries with that of diesel fuel by volume and weight.

Quantity of Energy Stored by Hydrogen or Battery, Compared With Diesel	% by volume	% by weight	Note
Diesel	100%	100%	
Compressed Hydrogen (350 bar)	8.1%	23.3%	1
Liquid Hydrogen (at minus 253 °C)	25.8%	48.4%	1
Liquid Ammonia (at 10 bar)	31.9%	7.4%	1
Battery pack - current	4.7%	1.5%	
Battery pack - expected by 2035	7.2%	2.3%	2
1 - includes allowance for cylinder weight 2 - as predicted by the Automotive Council's Advanced Propulsion Centre			

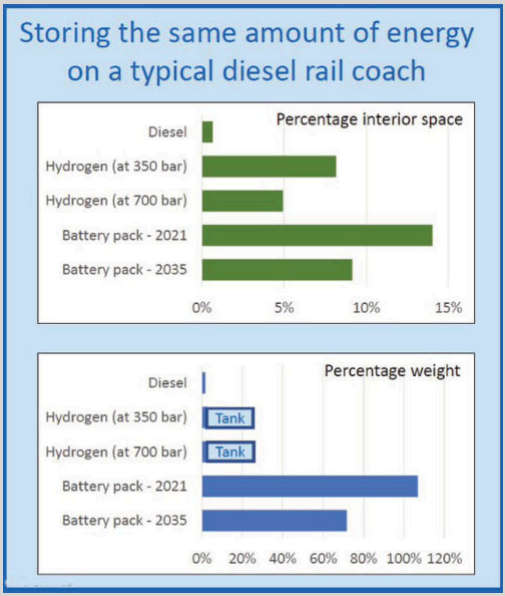
Although compressed hydrogen at 350 bar has only one-twelfth of the volumetric energy density of diesel fuel, this is the highest energy density of any practical alternative and is 72% greater than a battery. However, by 2035, battery energy density could be much closer to that of hydrogen.

For passenger trains, hydrogen's low energy density might result in a loss of passenger space as is the case with the Hydroflex train shown in Glasgow during COP26. However, this is not a problem for Alstom's proposal to build a new hydrogen train which will accommodate roof-mounted tanks within the UK loading gauge.

A crucial point is that the ability of fossil fuels to store so much energy and their relatively low cost of extraction and refining makes them much cheaper than zero-carbon alternatives. Hence zero-carbon alternatives are not likely to be widely used unless fossil fuels are subject to a carbon tax. Whether this is a realistic aspiration remains to be seen.

Another possible zero-carbon alternative is using diesel engines powered by sustainable fuels.

However, truly sustainable fuels are expensive and will be a limited resource. The Committee for Climate Change (CCC) suggests that sustainable biomass could replace a maximum of around 10% of fossil fuel energy by 2050. Synthetic sustainable fuels are an option but, as they use hydrogen as a feedstock, they will be more expensive than hydrogen.



Hydrogen economy

Worldwide production of hydrogen is currently 80 million tonnes per annum with almost all production by reforming methane. Emissions from such hydrogen are only slightly less than fossil fuels. Zero-carbon hydrogen needs to be produced by electrolysis powered by net-zero electricity.

Hydrogen produced by electrolysis is more expensive than that produced by reforming. Yet the cost of hydrogen produced by electrolysis is essentially the cost of the kit (i.e. wind turbines and electrolysers) which, unlike the price of fossil fuels, is generally predicable. For this reason, a recent order for hydrogen trains was able to include 30 years supply of hydrogen. Businesses like price certainty.

The CCC's net-zero report shows that, if the net-zero target is to be met, the UK needs a large hydrogen economy. Speaking at COP26's Hydrogen Transition Summit, Scottish Government Minister, Michael Matheson, also stressed that Scotland considers hydrogen to be a crucial part of a low energy future. He felt that "wind was the new oil" as Scotland's offshore wind turbines could be used to produce cheap hydrogen for export. Moreover, the well-established petrochemical sector has the skills to diversify into a hydrogen economy.

This summit also considered the use of hydrogen for domestic heating. For this, the UK's Department for Business, Energy, and Industrial Strategy (BEIS) set up a £25 million Hy4heat initiative in 2017. This has developed a range of hydrogen appliances and produced a safety assessment, that has been independently reviewed by the Health and Safety Executive, which concluded that hydrogen could be as safe as natural gas in the home. As part of this initiative, the world's first hydrogen neighbourhood in Levenmouth will see up to 300 homes heated by hydrogen in 2023.

The summit indicated that by 2050, the hydrogen economy could be worth hundreds of millions of pounds. Key themes during the event were the synergy between hydrogen and renewable power generation and the importance of creating a strong end-use market for which a global carbon tax on fossil fuels was required. As previously mentioned, whether this is realistic remains to be seen.

A full report on this summit is available online: "Rail Engineer: Hydrogen fuel of the future?" *www*

https://www.railengineer.co.uk/hydrogen-fuel-of-the-future/

Batteries

Significant advances in battery technology now make battery powered trains a realistic option in some situations. Both the Welsh and Scottish Governments are respectively developing permanent and transitional partial electrification options that will use battery powered EMUs that are charged whilst under the wires. Yet, as shown by the table, by volume, a traction battery can only store one-twentieth of the amount of energy of a diesel tank. Hence, battery powered trains have a range between charges of the order of tens of kilometres.

Rapid charging technologies offer an opportunity to extend this range if it is acceptable to stop a train for, say, 10 minutes every 100 kilometres.

Whilst there is no doubt that improved batteries will be developed, as shown by the table, it is unlikely that this will dramatically increase their storage capacity.

Both the monetary and carbon cost of batteries also needs to be considered. Most analysts consider that battery costs will continue to drop. Yet there are currently 1.4 billion cars and vans in the world of which less than 1% are electric vehicles. What happens to battery prices if and when a substantial proportion of these vehicles become electric is an interesting question.

An indication of battery carbon cost is that, with current grid CO_2 emissions, a small car will take around three years to save the CO_2 emitted making its battery. Larger luxury cars will take up to six years to pay back that carbon.

Future Far North trains

For almost all the rail network, rail decarbonisation requires electric trains. They are a future-proofed solution as no amount of innovation can produce a zero-carbon self-powered vehicle that is more efficient that one that uses electricity as it is generated.

Scotland's hydrogen train at Bo'ness

For those few lines, such as the Far North, where electrification is not appropriate, zero-carbon options are sustainable fuels, batteries, and hydrogen. It is unlikely that any new solutions will emerge at this stage. With good reason, Scotland's rail decarbonisation plan does not specify the type of alternative traction for non-electrified lines as no-one can know what the best solution will be in 2035 so it is best to keep options open. Hence the development of Scotland's hydrogen train at Bo'ness is a worthwhile initiative, particularly as this could be part of the Scotland's developing hydrogen economy.

My informed guess is that by 2035 the Far North and Kyle Lines will be operated by hydrogen trains. This is because sustainable fuels will be rare and expensive. Moreover, to provide the required range, battery development would need to exceed that predicted. There are issues of embodied carbon (the CO_2 emitted during manufacture) and cost, should there be an exponential increase in worldwide demand.

Hydrogen is currently the only net-zero option that provides the required range. It should also be part of the emerging hydrogen economy. This key factor is not considered by those who dismiss hydrogen trains. Yet a large-scale hydrogen economy would need a global fossil fuel carbon tax. Whether the world wishes to pay such a tax to ensure net-zero carbon emissions remains to be seen. If not, there will still be some demand for hydrogen as it is essentially a fixed-cost fuel and also offers the grid balancing required by renewable power.

I hope the above explains the vague "should probably" in the title of this article, especially as predictions can take some time to be realised. For example, in 1874, Jules Verne wrote of a world where "Water will one day be employed as fuel, that hydrogen and oxygen which constitute it will furnish an inexhaustible source of heat and light, of an intensity of which coal is not capable." It will be interesting to see if, 161 years later, the Far North Line will prove him right.

Hydrogen Trains Enter Service

On 24 August 2022 the first 5 of a fleet of 14 Alstom two-car *Coradia iLint* hydrogen trains entered commercial service on the Weser-Elbe-Netz regional passenger services between Cuxhaven, Bremerhaven, Bremervörde and Buxtehude in Lower Saxony, Germany. The remaining 9 units will be delivered by the end of the year when the route will become the world's first 100% hydrogen train railway. The line is around 75 miles long.

The trains have a declared maximum speed of 87 mph and a range of around 620 miles. On-board batteries are used to store electricity returned to the system by regenerative braking.

A fuelling facility has been built in Bremervörde. It has 64 storage tanks with a total capacity of 1800 kg, six hydrogen compressors and two fuel pumps. It is planned to produce hydrogen on site in the future using wind power for electrolysis.

Alstom has three other contracts for hydrogen fuel cell powered regional trains: 27 *iLint* units to be deployed in the Frankfurt metropolitan area; 6 (with an option for a further 8) *Coradia Stream* units for Lombardy in Italy and 12 *Coradia Polyvalent* hydrogen trains for four different regions in France.

The *Coradia Stream* units are of five cars, with the central walk-through car containing all the hydrogen power generating technology: the fuel tanks and fuel cells.

The *Coradia Polyvalent* trains are electro-hydrogen dual-mode multiple units and will be able to operate in electric mode under 1500V dc and 25kV ac, as well as with hydrogen power where there is no catenary. The four-car units will be able to operate at 100 mph and carry up to 220 passengers, with a range of 250-375 miles in hydrogen mode.

Ian Budd

Stadler Rail Press release

Stadler introduces the Class 99 bi-mode Co-Co locomotive in the UK with the first contract for 30 units.

Stadler, Beacon Rail and GB Railfreight (GBRF) have signed an agreement for the supply of 30 Class 99 bi-mode Co-Co* locomotives including spare parts. Following the success of the EURODUAL 6-axle locomotives in continental Europe, with about 100 units sold, Stadler is introducing this concept to the UK. Like its sister, the Class 99 is a versatile Co-Co locomotive, adapted to the British gauge and specifications, combining 25 kV AC electric and diesel operating modes. It represents a new generation of locomotives that offers rail operators many economic and environmental benefits and underscores Stadler's green credentials. *[two six-wheel bogies, all axles powered]

Stadler has signed the first contract with the leasing company, Beacon Rail and GBRF, for the supply of 30 Class 99 locomotives, which includes spare parts.

Able to reach speeds of up to 120 km/h, the powerful machines can run on 25 kV AC electrified lines with a power of 6,000 kW at wheel. In addition, they feature a high-power low-emissions Stage-V engine allowing them to operate on non-electrified lines. The Class 99 locomotives boast an outstanding tractive effort of up to 500 kN, high hauling capability and performance. They also offer optimal visibility and an excellent working environment for the drivers, including ergonomic desks.

"Stadler has extensive experience in the UK locomotive market. Over recent years, we have introduced the Class 68 diesel-electric locomotive, the Class 88 bi-mode locomotive and Europe's first tri-mode locomotive, the Class 93, in line with our commitment to decarbonising rail transport", said Iñigo Parra, CEO of Stadler Valencia. "We are very proud to go one-step further with the development of the Class 99, a versatile, high-performance locomotive that will provide environmentally-friendly and cost-effective rail transport services, supporting modal shift to rail", he added.

Beacon CEO, Adam Cunliffe said: "Beacon is proud to introduce the Class 99 to the market; this is the result of a collaborative approach with our long-standing customer GB Railfreight and manufacturer Stadler. The Class 99 order underlines Beacon's drive to support the UK's journey towards a greener and more efficient rail network. We look forward to supporting the delivery programme for these locomotives ahead of introduction to service in 2025, providing further momentum to facilitate modal shift from road to rail".

John Smith, CEO GB Railfreight, said: "Today's announcement is an important milestone for GB Railfreight and the UK, and I want to thank the teams at Stadler and Beacon Rail for their collaboration in producing a train fit for a greener future. Rail freight is already a more sustainable alternative to moving goods by road, but the Class 99 will increase our industry's levels of sustainability and propel us further towards meeting the UK government's task to decarbonise the rail industry by 2040 in support of the UK's net zero ambitions.

[*Railway Gazette* pointed out that the modular design would enable the diesel engine to be removed and replaced with a battery or fuel cell module once the technology is felt to be sufficiently advanced for regular main line freight use.]

Parliamentary Questions

Question S6O-01052: Stuart McMillan, Greenock and Inverclyde, Scottish National Party, answered 4 May 2022

To ask the Scottish Government what its position is on the removal of peak fares from ScotRail services.

Jenny Gilruth, Minister for Transport: On April the 1st, ScotRail passenger services were successfully brought into public ownership. This move now offers us the opportunity to take the right actions to make rail travel more sustainable, affordable and accessible for the people of Scotland.

Affordable rail travel, including a consideration of peak rail fares, will be considered by the Fair Fares review. This review will seek to consider the affordability of public transport across the network, whilst also considering how journeys can be better connected through integrated ticketing, for example. In the context of the cost of living crisis it is absolutely essential that all Governments consider how to support an affordable public transport network.

Question S6W-08355: Graham Simpson, Central Scotland, Scottish Conservative and Unionist Party, answered 18 May 2022

To ask the Scottish Government what plans it has to encourage more people to return to travelling by rail.

Jenny Gilruth: Following the pandemic and the move to a publicly owned ScotRail we are committed to encouraging people to return to our railway. We now have the opportunity to ensure that passenger services reflect changing passenger needs and travel behaviours whilst restoring the financial sustainability of rail services in Scotland.

On 9 May, I launched ScotRail's 50 per cent off peak ticket offer [now ended]. This fares offer, funded by the Scottish Government, is the latest 'Yours to Use' initiative and is focused on welcoming customers back to rail as the country continues to recover from the pandemic.

Earlier this year, I announced that our National Rail Conversation will offer rail staff, passengers and communities an opportunity to contribute to the future Vision of Scotland's Railway. This will help us to fully understand what the people of Scotland want and need when it comes to choosing rail as their mode of choice.

Question S6W-09346: Liam Kerr, North East Scotland, Scottish Conservative and Unionist Party, answered on 25 July 2022

To ask the Scottish Government, further to the answer to question S6W-08743 by Jenny Gilruth on 14 June 2022, whether it will provide the information requested regarding when it will replace the 25 Class 43 HSTs in the ScotRail fleet; whether it will confirm whether Transport Scotland's position remains that such replacement will occur only when "Network Rail has completed the electrification of all or most of the routes they serve", as reported in The Herald on 21 May 2022; when it anticipates that "the electrification of all or most of the routes they serve" will be completed, and for what reason it did not provide this information in its answer.

Jenny Gilruth: The replacement of train fleets in Scotland, including the HSTs, is aligned with the phases of the Decarbonisation Action Plan, a link to which is provided here:- https://www.transport.gov.scot/publication/rail-services-decarbonisation-action-plan/

This timescale is of course subject to continuous review in line with delivering the decarbonisation of

the rail network in Scotland affordably and practicably and any other relevant developments, including recommendations arising from the Steering Groups considering the recommendations of, and subsequent analysis from the recent RAIB report into the Carmont accident.

Question S6W-09581: Graham Simpson, Central Scotland, Scottish Conservative and Unionist Party, answered on 29 July 2022

To ask the Scottish Government how many battery trains it plans to procure for ScotRail in the next five years.

Jenny Gilruth: Work is proceeding to hold a procurement competition for new battery and electric trains to operate decarbonised rail passenger services on the Fife Circle and Borders routes, which will allow replacement of 42 ScotRail Class 156 diesel trains. We will also use the opportunity to secure options for further electric trains in future.

Question S6W-09580: Graham Simpson, Central Scotland, Scottish Conservative and Unionist Party, answered on 29 July 2022

To ask the Scottish Government what discussions Transport Scotland has had with ScotRail about procuring battery trains to run on Scotland's rail network.

Jenny Gilruth: Abellio ScotRail (at the time), Network Rail and Transport Scotland were all involved in the development work leading to the publication of the Rail Services Decarbonisation Action Plan in July 2020. Battery trains, supported by partial electrification of routes were set out as an option alongside other forms of rail traction.

Transport Scotland and (now) ScotRail Trains Limited are regularly engaged in discussions over planning for the procurement of new zero emission rolling stock.

Question S6W-09820: Finlay Carson, Galloway and West Dumfries, Scottish Conservative and Unionist Party, answered 15 August 2022

To ask the Scottish Government whether it has plans to introduce free rail travel in Dumfries and Galloway for anyone holding a bus pass.

Jenny Gilruth: The Scottish Government currently has no plans to extend the statutory free bus schemes to include rail services.

We are, however, undertaking a Fair Fares Review that will look at look at the range of discounts and concessionary schemes which are available on all modes including bus, rail and ferry.

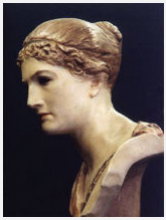
Question S6W-10008: Liam Kerr, North East Scotland, Scottish Conservative and Unionist Party, answered on 16 August 2022

To ask the Scottish Government what steps it is taking to encourage a modal shift of HGV traffic to rail, as per the Rail Services Decarbonisation Action Plan.

Jenny Gilruth: The Scottish Government's leadership in support for rail freight is outlined in our rail freight strategy and put into practice with significant investment and a first of a kind regulatory growth target. Our £25 million ring-fenced fund for rail freight for the period 2019-24 is unique to Scotland and we continue to offer Freight Facilities Grants unlike some other parts of the UK. These funding opportunities are generating private investment in rail freight facilities and unlocking opportunities for rail freight across the country.

Our rolling programme of efficient electrification, detailed in the Rail Decarbonisation Action Plan, will also encourage and facilitate modal shift to rail freight as it brings significant environmental benefits, improves connectivity and creates additional capacity supporting the key role rail freight has to play in helping us achieve our transport emission targets.

CASSANDRA WRITES:



Habitués of bingo halls are aware that the routine cry of "shake the bag" miraculously increases the probability that the yet-unmarked numbers of the crier will soon appear. It is dispiriting when the bingo patron hears numbers called, none of which advances his (or indeed, her) journey towards enrichment. Over 1000 days have passed since the DfT updated its promised (a much degraded word, sadly) pipeline for doing useful stuff to the infrastructure. In the hope that the DfT's bag might be shaken a few thoughts are offered.

Daily we see evidence that the global heating crisis is, if anything, advancing faster than was thought. Glaciers recede, wildfires burn in places normally unburnt, temperature records are shattered. Yet one glacier remains solid and unaffected - the glacier that is the DfT's decision process. Officials spend weeks deferring decisions until every t is not only crossed, but illuminated as beautifully as a mediaeval manuscript. We all remember how the Great Timetable Chaos in the north of England a few years ago was caused by the DfT taking well over half the time scheduled for the improvements to make up its mind, leaving the industry to take all the flak for not doing a couple of years' work in a handful of months. The lesson has not been learned. As of the time of writing CP6 has been running for 40 months. Admittedly COVID has made a mess of much of the planning, but that fact - that COVID has supervened - is surely a signal that much more urgency is now needed, rather than the long leisurely process of...doing nothing. Very soon the industry will be starting the lengthy process of planning for CP7, due to start in April 2024, likely to be only a few weeks before the next Election (unless Ms Truss wisely decides to grab her chance before the economic skies fall in).

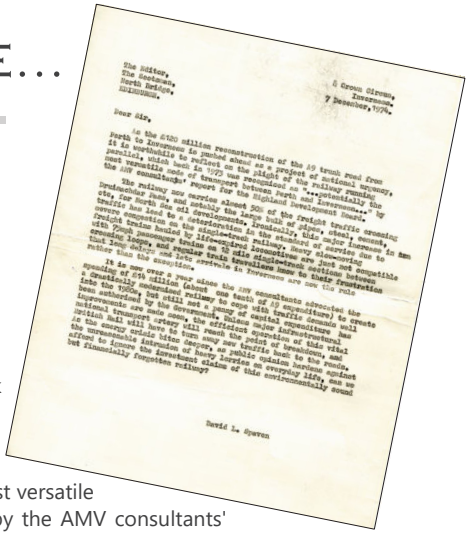
CP6 has been largely wasted. Industry leaders have had to focus on what "Great British Railways" will look like. The supply chain is deprived of orders. Skills are lost. The workforce is understandably keen to see wage increases. The Secretary of State says "not me, guv" while denying TOC management the freedom to negotiate. Passengers are receiving a worse service, and are likely to be paying a great deal more next spring.

Far North Express has contrasted the nice flat line of annual expenditure on electrifying the railway in Germany with the frightening ER diagram of the DfT's performance. Yet nothing changes - Secretaries of State come and go, most of them with little or no interest in the boring bit of their remit: the bit Mrs Thatcher so derided as being used only by other people. Yet this is the bit - were the DfT to act - which would make the sort of difference to the UK's carbon reduction targets that is urgently needed.

Railway commentators well remember the Serpell Report of 1982. It suggested massive cuts to the network which, at the railway's nadir, seemed capable of being taken all too seriously. Luckily it was torpedoed, but Serpell's ghost may still stalk the corridors of Great Minster House. If the unions "misbehave" might not the solution of so reducing the network that far fewer of their members were needed be one which might strike a chord? 40 years ago the ECML was going to stop at Newcastle and there would be no railway north of Edinburgh and Glasgow. Luckily no such nonsense is about to be visited on Scotland, but even here times are tough.

Some years ago a Member of the Friends of the Far North Line left a useful sum of money to us in his Will with the specific object of defending the Far North Line against possible closure. Since that threat has never seemed even remotely likely the money has been squirrelled away, even earning a decent rate of interest in happier times. Cassandra does not think that the FNL is under threat: everything he reads tells him that time and money are being invested in bringing improvements - request-stop kit, better RETB, a more passenger-friendly timetable based on Helmsdale, a loop even. Cassandra is equally confident that when he reaches Inverness there will be trains to carry him beyond into the desiccated south. But will there be a train from Waverley to Newcastle? Will diesel trains be as rare and exciting to small boys as steam locomotives are now? Will the DfT set any rigid targets for their removal? Will anyone shake their bag?

Plus Ça Change...



The Editor,
The Scotsman,
North Bridge,
EDINBURGH.

7 December 1974

Dear Sir,

As the £120 million reconstruction of the A9 trunk road from Perth to Inverness is pushed ahead as a project of national urgency, it is worthwhile to reflect on the plight of the railway running parallel, which back in 1973 was recognised as "...potentially the most versatile mode of transport between Perth and Inverness..." by the AMV consultants' report for the Highland Development Board.

The railway now carries almost 50% of the freight traffic crossing Druimachdar Pass, and notably the large bulk of pipes, steel, cement, etc, for North Sea oil developments. Ironically, this major increase in traffic has led to a deterioration in the standard of service due to severe congestion on the single-track railway. Heavy, slow-moving freight trains hauled by life-expired locomotives are just not compatible with 75 mph passenger trains on 12 mile single-track sections between crossing loops, and regular train travellers know to their frustration that long delays and late arrivals in Inverness are now the rule rather than the exception.

It is now over a year since the AMV consultants advocated the spending of £14 million (about one tenth of A9 expenditure) to create a drastically modernised railway to cope with traffic demands well into the 1980s, but still not a penny of capital expenditure has been authorised by the Government. Unless major infrastructural improvements are made soon, the efficient operation of this vital national transport artery will reach the point of breakdown, and British Rail will have to turn away new traffic back to the roads. As the energy crisis bites deeper, as public opinion hardens against the unreasonable intrusion of heavy lorries on everyday life, can we afford to ignore the investment claims of this environmentally sound but financially forgotten railway?

David L. Spaven

Far North Express writers often feel that we are repeating the same thing over and over again. At a time when it is explicit Scottish Government policy for there to be modal shift from road to rail for freight and passengers, we are still having to point out that with limited money available it is essential to have a modal shift of investment priorities too.

As reported elsewhere in this issue, Kate Forbes, Cabinet Secretary for Finance and the Economy, whilst expressing full support for investment in Highland railways at our conference, said she still wishes to have both the road and rail improvements done at the same time. Even that would be better than the current scenario on the Highland Main Line where there is virtually no investment in speed or capacity while the parallel road is being dualled. The current work on the A9 is planned to cost more than 60 times the amount spent in the last few years on HML improvements.

Much of David's letter could have been written today, 48 years later. Governments seem to be able to change their policies, but not their actions.

Will the Red Light Turn to Green?

Our AGM gave us some confidence that design of the Delmore Loop just north of Inverness is well under way and will be put forward for funding soon. The operational changes to the Far North Line in 2005, which unfortunately brought about a 25 minute deceleration to the end to end journey time, flagged up the urgent need for a loop near Lentran. Timings have hardly changed since then and any *en route* delays mean passengers are still being seriously inconvenienced and missing connections because of this. That it will have taken nearly 20 years to get this capacity improvement made is highly regrettable.

Funding for everything has got more difficult in the present uncertain economic climate. Highland schemes which have slowly and painstakingly worked their way up the pecking order are particularly vulnerable to being put on the 'To Do' shelf waiting for the purse strings to ease.

When the money situation does ease, history has shown that their funding bid has to start again but in a new situation where they are competing in an expanded pool with other new and desirable schemes which have since appeared. We have seen this so often before.

The UK Government's "levelling up" agenda was supposed to see their Treasury Manual revised to put less emphasis on BCR (Business Cost Ratio) and more on spreading economic progress including new (and retained) jobs being more widely distributed, rather than the current effect of making London and SE England more and more dominant year on year.

It was therefore sad in Scotland to see our ongoing Strategic Transport Projects Review (STPR2) continuing to put so much emphasis on 'most bang for their buck': "Future passenger rail investment should therefore be targeted on the strongest city-to-city markets as these are the routes where the greatest value from improvements will be realised." [STPR2 Draft Technical Report, P100] This will have the effect of strengthening the economies of Central Belt conurbations and increasing centralisation to the disadvantage of the rest of Scotland.

To my mind the word "Strategic" means having a strategy which ensures the smooth running of the whole nation. It should not be a *stratagem* which gains further advantage for those who are already well provided over those who are relatively disadvantaged!

At the moment train and ferry services to the further parts of Scotland are seriously challenged by lack of capacity. Rail communications in the Highlands are blighted by too many stretches of single track railway which lengthen schedules and exacerbate the effects of delays, passing them on from one train to another. The capacity to introduce any new freight or passenger services between Perth and Inverness, Aberdeen and Inverness, and Inverness to Wick and Kyle is almost non-existent.

More train paths are needed now in response to the Climate Emergency, to meet the 20% road traffic reduction target by 2030 and to reduce emissions from transport.

Prior to the electrification of both the Highland

Main Line and Aberdeen-Inverness (which seems not to be expected before 2030), capacity enhancements are badly needed. Up until 1987 the Crofting Counties Roads Scheme helped to double single-track roads in the Highlands. Would a similar specially designated fund be a quicker way to achieve this for Highland railways?

Aberdeen-Inverness

The recent redoubling of the line from Aberdeen to Inverurie has allowed a three-fold increase in the number of trains at certain times of day, and a hugely improved service.

However, services on the continuation of that line from Inverurie to Inverness are still seriously crippled by lack of further capacity. The first STPR in 2008 promised a reduction to two hours of the journey time between Aberdeen and Inverness. This was Priority 4 and had a target date of December 2016.

Successful trials of freight trains for whisky and timber have still not yet led to regular services and those freight trains which had to use the route as a diversion (when the line south from Aberdeen was blocked at Carmont for two long periods) could only do so once certain passenger trains were cancelled.

The short new loop currently being built at Inverness Airport Station (Dalcross) will help to make operation of the line a bit easier, but the real impediment is the 18 mile single track section from Elgin Station to Keith Loop (just east of Keith Station). Such a bottleneck on the road would not be tolerated - it would be like having to wait at a set of traffic lights on red for 20 minutes.

The solution to this is to reinstate the Orton Loop just west of the Spey bridge, preferably extending it as a dynamic loop for several miles towards Orbliston.

Given that the Aberdeen to Inverness line improvements were given such a high priority in 2008 it was a real surprise that this work was not included in the 45 enhancements proposed in the 2022 STPR2 redraft. Representations have been made by many consultees to have this corrected.

Reinstated loops are also needed elsewhere on the Inverness-Aberdeen route, in the vicinity of Cairnie Junction and Pitcaple. It is ironic that a line with such potential for tapping in to the profitable whisky industry in Moray and the former Banffshire, which provides so much tax revenue, should be so starved of investment.

The Aberdeen to Inverness line is the only diversionary route to Aberdeen or Inverness when blockages occur between Dundee and Aberdeen, or on the HML north of Perth. Freight contracts are particularly valuable and the trains must get through otherwise the traffic may be lost. It is strategically vital.

Far North Line

On the Far North Line, having now begun the process of addressing single-track limitations, reinstated loops at Kildary, Kildonan (or Kinbrace), and Altnabreac would greatly reduce the serious delays caused by late running escalating to other trains on the line. They would also help increase capacity.

Highland Main Line

On the HML there are four places where new or reinstated loops would be very helpful: Ballinluig, Newtonmore, Murthly and Daviot (where the double-track out of Inverness formerly ended before being cut back to Culloden).

Conclusion

That providing the capacity for more freight and passenger trains is urgent is obvious from the new summer timetable's deceleration of trains from the Central Belt to Inverness. Trains now have extended dwell times in Perth station to wait for a clear path north. The 19:07 Glasgow to Inverness for example has a 5 minute pathing allowance north of Blackford and another of 8 minutes between Hilton Junction and Perth, followed by a 10 minute dwell in Perth station. At that time of night HML passengers would much rather get home around 20 minutes earlier i.e. 22:19 rather than 22:39 in Inverness!

The 15:07 Glasgow to Inverness is similarly challenged with a 15 minute stopover in Perth.

Both First Ministers since 2008 have said, "Railways must compete with roads". Please give us the tools to do so. The red light on capacity urgently needs to turn green on these lines.

Richard Ardern

Heading photo of Dingwall North Junction, by Sandy Colley

£120m Electricity Feeder Station Plan

In a Press Release on 1 July 2022 Network Rail announced the reassuring news that work is planned to provide sufficient power to Scotland's future electrified system, which may eventually extend as far north as Tain.

Network Rail will invest more than £120m of Scottish Government funding in the next three years to boost the electricity power supply into Scotland's railway network.

The investment will see six new feeder stations at strategic locations across the network and a further nine sites upgraded to increase the resilience and reliability of the infrastructure for the operation of electrically powered passenger and freight traffic.

As well as increasing the resilience of the existing network, the new connections to the national grid via the feeder stations will increase the overall capability of the 25kV electrified network. This will accommodate future passenger and freight growth and reduce the railway's carbon footprint by supporting the removal of diesel passenger trains from the network.

It's all part of efforts to make Scotland's Railway greener in line with the Scottish Government's commitment to decarbonise the passenger rail network by 2035.

A contract to deliver the initial phase of work has been awarded to SPL Powerlines.

Scottish Government Transport Minister, Jenny Gilruth said, "Increasing power supply into the Scottish railway network is critical to enabling our ambitions to run more cleaner and greener electric trains.

"Upgrading the power supply network will enable the introduction of electric trains on services to East Kilbride and Barrhead, on the Borders line and across Fife but will also support increased traffic on existing routes such as the East Coast Main Line.

"This investment further demonstrates this Government's commitment to creating a railway for Scotland that is fit for the future, for the benefit of employees and passengers. We want a rail infrastructure for Scotland that helps to cut emissions, to provide sustainable travel options for people and for freight, and which provides fair work and highly skilled employment opportunities."

Alex Hynes, managing director of Scotland's Railway said: "In tandem with the Scottish Government's ambitions to increase the number

of electric trains running on Scotland's Railway, there comes an increase in the demand for power to operate these services.

"Investing in the power supply infrastructure will not only make the current electric network more resilient, it also delivers the significant growth in capacity needed as we continue to electrify our railway.

"Introducing quieter, quicker and greener electric trains on more routes across the country will enable both passengers and lineside communities to experience all the benefits that electrification of the rail network brings."

Lee Pounder, Regional Director, SPL, said: "We're delighted to be awarded this phase one contract and to be working on the fully integrated delivery of Scotland's Railway's traction power requirements alongside Network Rail."

Electrification north of the Central Belt is at an early planning stage at present so no decisions have yet been made about the exact requirements for feeder stations, or their locations.

Station Survey 2022

www

In April and May this year five members of the FoFNL Committee divided all the stations on the line between them and visited each armed with a questionnaire. The aim was to look at all aspects of each station that affect passengers and to report the findings to ScotRail and Network Rail for attention.

The last survey was done in 2015, the pandemic causing a longer gap than usual. Rather disappointingly many issues raised then were still extant.

The results were tabulated and two summary documents created. The table and the two summaries were then sent on to ScotRail to work with NR as required. These documents are available on this issue's companion page on our website.

To give an idea of what we found it would be fair to say that some easy-to-fix issues such as litter are being kept under control, but items requiring more work, such as the provision of tactile edging to increase safety for the visually impaired, have been allowed to lapse.

A particular issue on several stations is non-working help buttons. Given the problems the railway sometimes experiences with the Customer Information Screens these are essential. The good news is that, as part of an ongoing communications upgrade, they are likely to be working fairly soon.

There are many problems for disabled passengers; six of the more remote stations have sub-standard platform surfaces making wheelchair use difficult, dangerous or impossible; some stations have no step-free access to the other platform and some have rough ground at the station approach. Obviously the provision of lifts where there are two platforms would be prohibitively expensive. It would seem that the only possible solution is a fixed track crossing which would require certain safety aspects to be covered, as well as the need for help from train staff, and quite probably a derogation from the Office of Rail and Road which is the safety regulator.

We also looked at cycle storage provision and car parking, both of which are important to encourage the public to use the railway. Station signage outside is sometimes insufficient - there's no point in hiding the stations! Local maps were sometimes erroneous and bus information was absent at all stations except Inverness.

We have not yet had a detailed response from ScotRail or NR but this is understandable given the extreme disruption caused by industrial action, which is using up many personnel resources. Assurance that this is a worthwhile exercise comes from David Simpson, ScotRail's Service Delivery Director, who said, "This is an invaluable survey which does give us and the NR team a good insight into what's needed."

Getting Value for Money on Rail Investment

From the Campaign for Better Transport website: With pressure on the rail industry to save money, ***Christian Irwin****, Rail Investment Centre of Excellence Director at Network Rail, has written this guest post to explain what the organisation is doing to slash the cost of rail investment projects.*

The railway industry needs to save money. Now more than ever, we must become more efficient in what we do. At Network Rail, we've been looking at new technology, innovations, and smarter ways of working that will enable us to complete our projects quicker and cheaper, but without ever compromising on safety.

I head-up the SPEED initiative. It's a joint programme between Network Rail and the Department for Transport aiming to half the time and slash the cost of rail investment projects. The goal is to improve the service being provided for passengers and freight users, whilst also making us a more dependable partner that's easier to work with.

As we recover from the global pandemic, adapt to changing working and travel patterns, and cope with industrial action, we must focus on squeezing every penny of value out of every pound invested.

And we can't do this on our own. The whole industry must work together.

What is SPEED?

To save time and cut cost, we've started to overhaul and streamline 11 different themes within our projects. This includes challenging and changing processes, covering a wide scope such as; procurement, governance, assurance, standards, and timetabling. SPEED is all about looking at new and different ways of working, being curious and challenging, and asking ourselves: "Can we do this differently? Can we be better?"

We took these 11 areas and put the new ways of working to the test, trialling them on a number of test projects to prove it could be done. And so we demonstrated it is possible to half the time and slash the cost of a number of those areas within our projects by streamlining our processes, using new technology, innovation and working smarter.

And the impact? Of the projects where the SPEED principles have been applied so far we've committed to savings of 633 months of time and £3 billion of costs. Money that can be invested elsewhere to benefit passengers and UK taxpayers, and time saved that can be spent elsewhere on the railway for further upgrades.

11 SPEED themes

Based on what we learnt from the initial SPEED test projects, 11 thematic workstreams were established. These themes address complex, systemic issues ranging from challenging our ways of working, to potential for legislative change. The themes have been set up in a more traditional transformation approach, with clearly defined plans and deliverables. Each of these themes has also been through a process of iterating their scope and plans through a series of challenge panels which have ensured the ambition set out initially is being maintained.

- Planning and consents
- Governance
- Assurance
- PACE (Project Acceleration in a Controlled Environment) and Optioneering
- Timetabling
- One-team culture
- Interoperability and Common Safety Method (CSM)
- Standards
- Procurement strategy
- Access and possession
- Capability and Culture

Our next challenge is to embed this learning across our business, so all our projects are run to SPEED. In this way, we will all help improve Network Rail's efficiency, saving time and money.

NR is operating a similar process in Scotland - we hope to have news about that in the future...

Dalcross Blockade

From late evening on Friday 8 July, Network Rail carried out 54 hours of continuous working on Inverness Airport Station (Dalcross) development that could not be undertaken safely while the railway was open.

Bus replacement services were provided and Network Rail issued a press release:

Since starting work last October the new £14m station at Inverness Airport has seen the construction of new platforms, the creation of the foundations for what will form the footbridge and lifts and the start of work to create the access road and car park at the site adjacent to the airport.

This weekend will see the demolition of the masonry road bridge to the east of the station site [above], installation of drainage, platform works and welding and stressing of the double-track section which has been created through the station.

The project, which is scheduled to complete in December, will deliver a two-platform station on the Aberdeen-Inverness line with step-free access, via a footbridge with lifts.

The station will have 64 car parking spaces with 10 electric charging facilities, four disabled spaces and cycle parking. There will be a new access road to the station for motorists and access to both platforms for pedestrians and cyclists.

Inverness Airport Station will deliver improved travel links to the growing Inverness Airport Business Park and the new town of Tornagrain.

www

David Millar, Project Manager for Network Rail said: "The construction of Inverness Airport Station continues to gather momentum and this weekend marks a significant point in the project. The removal of the old masonry arch bridge and connecting the passing loop are both important milestones in the delivery of the new station."

[FoFNL hopes to see truly integrated travel, with Highlands and Islands Airports Ltd deciding to build their new air terminal next to the station, which is Option 4 in their future plans.]

Photos: Network Rail

Integrated Transport in The Netherlands

By Ian K Watson

Boris Johnson is reported as saying that the railways do not need ticket offices. Users of the Far North Line already know about this. But what would you think if Inverness had no ticket office? In The Netherlands only the largest stations now have a ticket office; but the whole set-up there is very different from Britain. Forty years ago I lived in Alkmaar when there were ticket offices on Dutch stations; but recently I went back and found great changes. Before getting to the business of tickets, I'll describe how things differ from Britain.

As in Germany, Switzerland, and Scandinavia, The Netherlands has a totally integrated public transport system. When the annual timetables are prepared the operation is done for all the trains, buses, trams and ferries, and connectivity is paramount. In Alkmaar, as in most towns, the bus station is outside the railway station. When I lived there, every half hour all the trains arrived within a five minute period, waited up to five minutes and then departed. More than that, the northbound trains to Den Helder and Hoorn were across the platform from one another, and likewise the southbound trains to Amsterdam and Haarlem, making for easy changes. Simultaneously the buses arrived and departed, so connections between bus and train were easy, and that's still so. Perhaps if you were in a hurry to get to Den Helder you might think it was a nuisance that the train waited in Alkmaar for five minutes, but this was accepted. Those of you who have been to Switzerland will know that the Swiss are even more slick at doing this than the Dutch. I have not cited the current train service in Alkmaar because, as in Britain, there have been some reductions because of the effects of the pandemic.

And if you use the Nederlandse Spoorwegen's (NS = Dutch Railways) app on your mobile phone, you will find that, as well as all Dutch stations being listed, every single bus stop is there as well: So during my recent holiday when I also went to Zutphen I was able to plan my journey home from Zutphen station to the bus stop in IJmuiden, close to the terminal for the ferry to North Shields. So very different from Britain, where every train company has its own web site, and some of them are very frustrating – the Avanti one does everything possible to prevent you buying an off-peak return ticket; so I always use the ScotRail site. In The Netherlands there are a number of different train companies – the NS looks after the main long distance

trains, and other companies such as Arriva run many of the local branch lines; but they are all included in the NS journey planner.

Another important difference is that Dutch train fares are calculated on the basis of Euro cents per kilometre. Those old enough will remember that's how it used to be in this country (pence per mile) before BR introduced market pricing, making the more popular journeys more expensive; and which consequently led to the profusion of different types of tickets that we now have. In The Netherlands, as in Britain, there are reductions for frequent travellers and others holding discount cards. But the base fare is still cents per kilometre.

But how do you buy your ticket? There are two principal ways: you can buy on-line, or you can use the *OV kaart*. Buying on-line is very similar to Britain – you land up with a QR code on your mobile phone, which has to be scanned at the entrance gate to the station.

The *OV kaart* (OV – Openbare Vervoer = Public Transport) is a chip card. There is a charge of €7.50 to buy it, and at the same machine you can load it with credit. The machine will tell you how much credit is needed to get to your destination. It's also possible to buy OV cards at certain shops. There has to be a minimum credit of €20.00 to use the card on a train. You place it on a reader entering a station, or on a bus; and then again when getting off the bus, or leaving the station at your destination, and when you do you are informed of the remaining credit. Prominent at all stations are the yellow machines for buying and uploading the OV cards. The photograph of the forecourt at Hoorn, at the beginning of this article, shows one of the yellow ticket machines being used. These have replaced the ticket office in the old building.

In Britain the only place with anything like this is London (surprise?) with the timetables of buses and the Underground set by Transport for London (TfL), which contracts bus companies to run the services with all fares going to TfL; and then there's the Oyster card, very similar to the Dutch OV card.

One last thought. Since the time I lived in The Netherlands, the new polder (reclaimed land) Flevoland has been completed, with new towns like Almere; but the Dutch didn't just build new roads, there are also new railways. Similarly the Øresund bridge between Denmark and Sweden isn't just a road bridge: on the lower deck there's a railway. In those countries you couldn't imagine just building bridges exclusively for the A9 across the firths north of Inverness. And south of Inverness money is being found to dual the A9 while the Highland Main Line remains single track. The lack of imagination of successive UK governments when it comes to public transport is depressing. At least the Scottish Government is rather better, but perhaps that's not saying very much when you look at what happens across the North Sea.

Comment

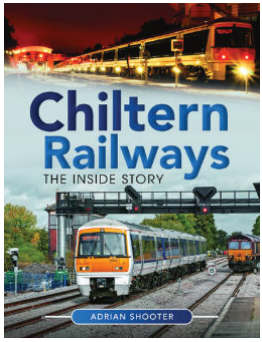
www

We have to ask ourselves, is there any reason we can't do this here?

The UK, and to a lesser extent Scotland, seems to regard anything which reduces 'choice' with suspicion. The perceived virtues of 'competition' to bring down prices and enhance quality and choice have brought us to a transport 'system' in this country which must be a source of complete bafflement to visitors from The Netherlands, and elsewhere.

An excellent test of whether something is good the way it is, or needs to be changed, is to imagine changing it. For an example we could take an integrated transport system, such as that described here and consider whether it would be improved by taking various steps. Perhaps we could begin by abolishing the *OV-chipkaart* and replacing it with a multitude of separate ticketing systems for the various modes of transport. We could follow by demolishing the bus stations which exist adjacent to the railway stations and rebuilding them a ten-minute walk away. And so on and so on...

Chiltern Railways:
The Inside Story



Adrian Shooter, Pen & Sword Transport, February 2022

ISBN: 9781526792495 Hardback: 192pp. £30.00

As a child in the 50s and 60s my local railway line was what is now known as the Chiltern Line. I lived on the very edge of Greater London and watched with excitement as trains rushed past, scooping up water from the Denham water troughs on their way from Birmingham and Birkenhead, or even Sheffield.

This was an interesting railway from the point of view of watching trains. From opening in 1905 to 1948 it was known as the Great Western & Great Central Joint Railway, as could be seen on the warning sign about trespassing, near where I used to balance with my feet on the uncomfortable wire fence [above]. By then the line was part of the BR London Midland Region, so the only Big Four companies' steam locomotives which you never saw were Southern Railway.

By the time I was a teenager the line had been drastically reduced in importance but was still my quickest route to central London - 20 mins to Marylebone (my favourite London terminus) as opposed to around 40 by Metropolitan Line underground, or Central Line tube. I bought a BR UK timetable and started to imagine a new use for my local railway; the track was still there for trains to run from Birmingham to Marylebone, although of course they never had, since the GWR trains from there had run into Paddington.

www

I looked up all the timings in my BR all lines timetable book and spent a huge amount of time constructing a timetable to provide such a service. I don't know what I thought I was going to do with it!

I went on to begin a career in orchestral playing and gave it no further thought, but during the 1980s things began to change on that railway. Chris Green, fresh from his time at ScotRail, was in charge of Network Southeast and one of his first actions was to prevent the conversion of Marylebone Station into a bus station and its railway into a bus tunnel. At around the same time a rail user group began to agitate for better services on their Birmingham to London via Banbury corridor and in May 1993 BR began the first Marylebone to Birmingham service.

The ground was laid for the establishment of the Chiltern Railways franchise which was won by a consortium led by Adrian Shooter, who had been a BR employee since 1970.

Having been aware of Shooter's work via articles in Modern Railways over the years, and then having met him briefly at Bo'ness during his Vivarail battery train demonstration I bought *Chiltern Railways: The Inside Story* as soon as I heard about it, to find out what had happened to my local line since I'd moved to Scotland in 1976.

This inspirational book is the story of how Adrian Shooter and his dedicated team of railwaymen (N.B. gender-neutral term) ran what was arguably the most successful, and definitely the longest held, franchise under UK rail privatisation. I would go as far as to say that the book should be required reading for anyone involved in the running of railways.

Adrian Shooter comes across not just as a 'can do' character, but a 'will do', and of course 'did

do'. Starting from the foundations laid by Chris Green, who had overseen the Total Route Modernisation of the line, Shooter took on the task of creating an excellent railway.

To him running a railway had simple requirements: "Keep them safe, run the trains on time, delight your customers. Remember those things when others try to make everything complicated." Chiltern Railways, like most companies, had a mission statement. However, theirs was not to impress the public but to inspire the staff and was only visible behind the scenes. It read:

To be the best Passenger Railway in the UK.

All day, every day, we aim to offer a safe, reliable, welcoming and value for money service to others.

The key to putting this into effect was to involve staff and passengers in decisions whenever possible, both to explain and to consult. For example, when specifying new trains a large group of passengers was invited to test proposed seats for comfort, the result was a 50/50 split between two strong preferences. Both kinds of seat were therefore used in separate areas of the trains and passengers got used to knowing where 'their' best seats were!

Some large infrastructure projects were required and it soon became apparent that Railtrack was sometimes guilty of greatly inflated charges. Chiltern Railways needed to build a brand new station to be known as Warwick Parkway. After a two-year wait Railtrack eventually came up with a price of £13.4m. This seemed ridiculous so instead they arranged to have it built, with the help of John Laing plc, a major Chiltern shareholder, for a total cost of £5.4m. The station opened in 2000. Apparently Railtrack hadn't been interested in building small stations.

When Chiltern took over operation of the line there was a 28 mile section of single track, dating from BR retrenchment in the 1980s. Chiltern could only afford to have 18 miles redoubled initially, at a cost from Railtrack of £27m. A few years after completion it was decided that the remaining 9 miles should also be redoubled. Railtrack offered to do this for £180m. The difference came as a shock, so Adrian Shooter requested that he spend a day questioning ten of the Railtrack managers about exactly how they had come up with a figure of £180m. Using his knowledge as a railway engineer Shooter managed to get a reduced offer of £53m by the end of the day!

As railway industry observers we can't help wondering whether artificially inflated, or automatically generated, infrastructure costs are still inhibiting investment.

There are many observations in this book which are totally relevant to the Far North Line and railways in Scotland in general. Although a strong supporter of rail privatisation, Adrian Shooter does not believe it was carried out sensibly in the UK. The privatised systems which he thinks work well, such as in Japan, divided the national rail operations into vertically integrated entities, and he operated Chiltern Railways as closely to that model as he could get. ScotRail, in spite of being taken back into public ownership, still does not have full vertical integration. The separation of running trains and developing and maintaining infrastructure brings unnecessary difficulties. The ScotRail Alliance or "Scotland's Railway" is an effort to overcome this. And we should be optimistic because as Shooter says, "Contractual structures are not the be all and end all...people and guiding philosophies are much more important."

The book mentions many ideas put into effect by Chiltern Railways which could be put to good use on the FNL. For example a 'Taxibus' service was set up, similar to Demand Responsive Transport (DRT) now being considered around the UK, and Chiltern season ticket holders using Smartcards also have free travel on certain bus routes.

Soon after having successfully bid for Chiltern Railways, the Thames franchise became available. Adrian Shooter's comments on the state of that system illustrate his approach to running a railway properly: "Thames...was internally, as opposed to customer, focused and did not use its trains productively", he also found scruffy stations and terrible car parks. None of these features would 'delight passengers'!

In the final chapter of the book Shooter reflects on privatisation: "[It] happened at all because of political dogma in part of the Conservative Party. As a lifelong member of that party I have no hesitation in saying that, for the most part, those who advocated privatisation had thought no further than 'public sector bad, private sector good.'" Looking at the new situation in Scotland one has to hope that the reverse was not the only motivation. Interestingly, the benefits of public ownership currently felt by ScotRail managers - a chance to plan in the longer term and an opportunity to include staff in the planning and operational decision processes, are the same as those which inspired Adrian Shooter to aim for (and get) a 20-year franchise for Chiltern Railways.

Clearly, in terms of population, usage and geography, the Far North Line is far removed from the Chiltern Line. However, just because FNL residents live in a comparatively underpopulated area, they shouldn't be any less entitled to an excellent service.

Ian Budd

Jim Welsh Remembered

www

We were sad to hear of the death earlier this year of onetime BR freight manager Jim Welsh, who pioneered Far North freight with Norfrost and others in the mid 1990s. After the inaugural run of the *Caithness Entrepreneur* on 30 September 1995 trains ran to Georgemas Junction once or twice a week for several years and developed to include Safeway containers, although these unfortunately ceased to operate when Safeway was taken over by Morrisons who preferred road haulage.

John Holwell, a former colleague of Jim's, writes, “Many in Scottish freight and West of Scotland operations will remember Jim who worked with the legendary John Clark at Motherwell for some time before transferring to freight marketing with Transrail. Always a cheery positive individual with a ‘can do and will do’ attitude. He will be missed, but his memory will live on”.

John Yellowlees, FoFNL member and ScotRail Honorary Rail Ambassador, remembers a typical action by Jim when someone from the Culross Community Council wanted a bag of coal at the time of their 400th anniversary celebration in 1992. Jim obligingly dropped it off from a passing freight train. As John says, "Roll on a successful timber operation, which will be the best tribute to Jim."

Jim Welsh (second from left) caught on camera supervising the loading of the inaugural *Caithness Entrepreneur* on 30 September 1995. The Class 37 locomotive hauling the first train was named *Cwmbran*, perhaps an unintentional tribute to Jim's surname.

Photos: **Peter Robinson**

Moving On

One of our main, and most helpful, Transport Scotland contacts for many years has been Frazer Henderson, Head of Transport Policy. Unfortunately for us he announced his retirement in June. Frazer has always been a valuable person to talk to, a fount of knowledge about everything to do with rail in Scotland, always patient and ready with advice and information. He kept us informed about various projects and arranged for us to attend major conferences.

Frazer has introduced us to his TS successor, Fraser Lawson, and we look forward to a similar fruitful relationship with him - remembering all the while to spell his name with an 's'!

We know that Frazer is not just going to sit back and relax as he can often be found in the most unlikely places around the world pursuing his special interest in island flora, mountain flora and wild tulips. As the Alpine Garden Society website says, "He is happy to find plants and talk about them!"

On his travels he combines the main purpose with chances to enjoy whatever music he finds, as well as appreciating fine architecture that he happens upon. FoFNL wishes him a long and happy retirement.

Ian Budd

Wild tulips in Tien Shan, Kyrgyzstan, central Asia, famed as being the site of origin and diversity for Tulipa species.

Photos: Frazer Henderson

Young Stationmaster Looks Back

After reading about a talk Ian Budd gave to the Retired Railway Officers' Association in December 2021, RROA member ***Donald Stuart*** *wrote to John Yellowlees about the memories that JY's report of the talk had triggered.*

Donald begins with a brief history of his railway career:

My service began in 1952 in Inverness in the District Traffic Superintendent's Office under Allan Yeaman who used to give me sixpence for collecting salmon (ex Kildonan) off the north train addressed to himself. I went on to work in both the Enquiry and Booking Office before being called up for service in the RAF for three years, 2½ spent in Germany, before returning to the Booking Office and then becoming a Relief Clerk at my home station Dingwall. Much of this time was spent at Beauly where I studied and passed the Signalling Rules and Regulations exam.

On to Kildonan and then Stationmaster at Alyth Junction, including Meigle and Newtyle, followed by my final Stationmaster's position at Monifieth - the post of Stationmaster ceased to exist with the introduction of Area Managers. Various postings followed, including at Carnoustie and Montrose, before ending up in Dundee - at one time under the watchful eye of a certain Jim Summers, my Area Manager.[1]

To cut a long story short, I eventually became Assistant Outdoor Superintendent (East), Edinburgh, under another great railwayman for whom I had the greatest of respect, Alex Arnold.[2]

My career finally ended as Movements Officer, North, based at Perth, responsible for all lines North, East and West from Dunblane, Cupar to Aberdeen, Inverness to the Far North and Kyle Lines, also included was the West Highland line from Helensburgh Upper to Oban, Fort William and Mallaig.

Kildonan

On the Far North Line I was appointed Stationmaster at Kildonan, including Borrobol and Salzcraggie, in the early 1960s. I don't remember anybody using Salzcraggie, but there was an occasional passenger at Borrobol. The siding was used from time to time to stable a freight vehicle running a hot axle box.

Shortly after my appointment, Mohammed Ayub, about whom there is an article in the September 2020 issue of *Far North Express*, was appointed Stationmaster at Kinbrace and he used to visit me for tuition on clerical procedures associated with the position. At the same time John Prosser was Stationmaster at Helmsdale.

Not long after his appointment, Mohammed was involved in a shunting movement detaching the Dining Car from the Northbound service and attaching it to the Southbound service when, for whatever reason, it became derailed and as a result the north line was blocked for about 24 hours. Mohammed was not the most popular of individuals at this time! This was a booked daily operation at Kinbrace but when there was late running it often took place at Kildonan and on occasions Helmsdale.

During my time at Kildonan, free periods were spent panning for gold, along with my late wife, at nearby *Baile an Òir* "town of gold" or in the River Helmsdale next to the station. In the summer you had to contend with hordes of midges and in winter time it was too cold to attempt panning. I still have some gold in a bottle to remind me of those days. Another pastime was removing the occasional adder from the platforms!

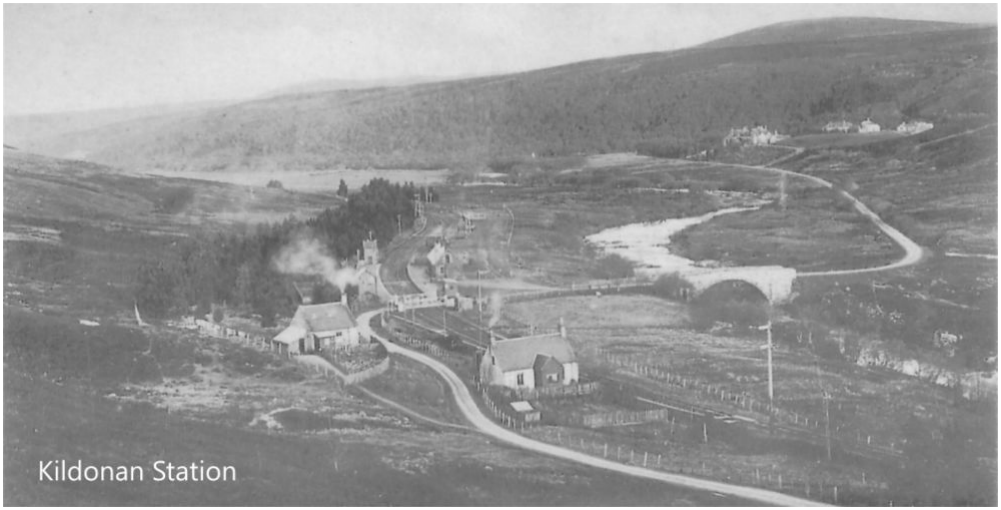
In those days winters could be harsh with frequent and heavy snow showers and on more than one occasion I had to get my wife to assist in snow clearing of the points to keep the the loop lines clear. No worries about health and safety then. This experience would stand me in

good stead for dealing with snow in the Dundee area in later years but that is another story. Happy days.

Donald commented, "I think I must be the last of the stationmasters still living, certainly for the Far North Line. When I was appointed at the age of 25, I was one of the youngest stationmasters in British Railways."

[1] Jim Summers M.B.E., former Chief Operations Manager for British Rail Scotland, whose working background was on the production side of railways and whose career included acting as consultant for railway companies and projects world-wide. After being seconded to DB (German Railways) to study the workings of the railway there, he went on to be responsible for major changes to the way the BR timetable operated, with fixed times from major terminals which exist to this day.

[2] Alex Arnold was a true railwayman's man, who spent some time in the Anglia area before coming to Scotland. He was Goods Agent for a time at Lothian Road in Edinburgh before becoming Outdoor Superintendent (East), based in Edinburgh responsible for an area from Berwick on Tweed to the far North and West of Scotland.



Kildonan Station

Railways in the Blood

As is often the case, Donald's family is intertwined with the railways. His late wife Marjorie, was one of the last to operate the railway telegraph instruments on a daily basis between Inverness and Perth before the telephone became the instrument of choice. Marjorie came from a long line of railwaymen with her grandfather, Robert Hepburn being Stationmaster at Lochluichart, Thrumster, Garve and Conon. His son, John Hepburn, was Stationmaster at Gollanfield, Merchiston, Melrose, Milngavie and finally Bowling. Marjorie's father, Eric Sutherland, started at Burghead and then spent most of his career in the Inverness area. Donald and Marjorie's late son, Alan, joined Network Rail under Hugh Wark, and established a fifth generation of railwaymen in the family.

Intriguingly, Marjorie's family connections go back to the 1870s and the construction of the Kyle line. William Garrow, Marjorie's father's uncle, was a ballast guard during the construction of the line to Stromeferry and then became Stationmaster at Helmsdale before being appointed as Superintendent of the Line at Inverness in 1890, retiring through ill health in 1901. William's son Robert became a Highland Railway engineer under Alex Newlands and went on to being involved in the construction of railways in Argentina.

On Marjorie's mother's side, her grandfather, Robert Hepburn, was a stationmaster at several locations including, Garve and Thrumster, and retired as stationmaster at Conon Bridge. His son John, also became a stationmaster at various locations including Gollanfield, and retired from Bowling.

Different Trains

All photos by Sandy Colley

[*Top*] 66126 and 66122 with the Rail Head Treatment Train (RHTT) at Feabuie on the HML on 1 October 2021.

[*Left*] 66735 and 66797 leaving Inverness for Kyle with the Bayer Weedspraying train on 8 August 2022.

[*Right*] The Network Rail test train visits the FNL regularly. Here it is heading south at Feabuie on 8 August 2022 with 43251 and 43257 in charge.