



NEWSLETTER 97 : May 2021

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Editorial

Freedom! Not completely, but at least we are able to go shopping, go to outdoor tourist attractions, even stay away from home in self contained accommodation. It is for this reason that I have been absent from a couple of zoom meetings, as I have been staying in a caravan near Filey... that freedom sure feels good!



I ended last month's newsletter with an observation about coincidence - and to start this month with another coincidence, Haven allocated the exact same caravan to us as we stayed in last July! The weather was very kind to us, and we managed a visit to the Worth Valley Railway on our way home.

The COVID precautions seemed thorough and we had a reserved compartment to ourselves... luxury! We

boarded the train at Haworth, where the station incorporates a gift shop which appeared - perhaps surprisingly - to be rather well stocked with model railway track and rolling stock, in OO, N and OO9 gauges. There was an opportunity to stretch our legs at Keighley, but we had to return on the same train, so after 20 minutes for two coffees (and some water for the loco) we set off again, to the end of the line at Oxenhope where the loco again had a drink and changed ends for the return to Haworth.

At present, operations are limited to Saturday & Sunday, pre booking is required and tickets are sold for round trips only from Keighley and Haworth, with two carriages boarding & discharging passengers at each terminus. The M65 means that it is within reasonably easy reach for a day trip from Southport.

Back to the troubled Island Line, where reopening was first set back from the end of March to mid May, news is now emerging of a further delay to "mid summer" with Vivarail (the builders of the re-engineered class 484) blaming software issues affecting the rolling stock. I'm not completely convinced by this, as the class 230 - which is essentially the same basic train but with different propulsion - has recently entered passenger service on the Marston Vale line but no doubt all will become clear.

I understand that the main difference between the two remanufactured trains is that the 484 are powered directly by DC from the third rail, whilst the 230 are powered by AC from on board diesel generator sets - made by Ford in South Africa. Perhaps the regenerative braking could be the "fly in the ointment" but this is all just conjecture at present. My planned visit in May will likewise also be delayed, as there is little to be gained without the trains running... unless a report on Rail Replacement Buses is a suitable topic for the newsletter!

Chairman's Report

Ian Shulver

There does seem to be light at the end of the tunnel, at least as far as this country is concerned, although we are likely to see some setbacks. I share this picture of The Jacobite passing over Glenfinnan Viaduct on the day that Scotland started to ease restrictions - what a splendid sight.



Although currently a limited number of us could meet up in the garden, in a fortnight's time a limited number will be able to meet indoors - but the rule of 6 still applies. Not until towards the end of next month at the earliest will things get back to "normal".

So, what have we got planned? Firstly we need to crack on with the garden. There is the shed roof to repair. Hopefully I will be ordering material this week. Then there is the old shed to take down, perhaps being able to save the rear gable wall to act as a privacy screen for the toilet. Then there is the exciting bit, construction of the garden railway for which Derek has made some provisional plans. We should also be able to start laying track for the N gauge part of HS3. I have managed to source enough flexitrack to complete almost two circuits. Unfortunately as yet there are no points but we could as a temporary measure use some old ones I have.

By the time you read this, I should have had both my cataract operations and if the results of the first one is anything to go by, should be able to get back to serious modelling after almost 18 months of dabbling. However, it may be a few months before I know whether I will be able to drive. All for now, I hope to soon see you in person.

Secretary's Report

Jim Ford

I write this from our lounge in Porthmadog looking out across the harbour. The clouds are gathering and rain is forecast for 1200 but it is as beautiful as ever in Wales. Much needed April showers are arriving on the very last day of April!

We have hardly been to our flat since the first lockdown as Wales and England have mostly been out of sync, but we did get to Towyn yesterday to ride on the members pre-season train and we are booked on a heritage

service from Harbour Station tomorrow to Dduallt and from Caernarfon to Beddgelert on Sunday - with a Prosecco hamper.



Firstly a timely reminder regarding the lockdown and our club. From Monday 29th March, access to the garden at Eastbank Lane Station has been allowed for members irrespective of travel distance for up to six. Eating and drinking must be outdoors. From Monday 17th May

groups of six may meet/eat inside the clubhouse. Since Monday 29th March outside work can be undertaken in groups of up to six by all members who may attend irrespective of travel distance. Eating and drinking must for the present remain outdoors. From Monday 19th May there will be no limit on the size of outdoor workgroups and up to six people may work and/or eat in the clubroom. However it is going to be some time yet before members will be able to regularly meet together inside, probably late June.

We have also heard from Ruth Trotter that she has been granted probate for Allan's estate and we are now able to collect the items which are intended for us. This consists of two layouts, Binns which is a Hornby Dublo two rail professional demonstrator and was a club project, together with Magersfontein, his South African themed layout with overhead electrification and 1970s blue and grey BR rolling stock and locos including some of Allan's legendary 'genuine fakes'. Although the theme is South African, the platforms are UK type and the layout is standard gauge and not Cape 3'6"! It has more than a look of the transition from the Clyde to the West Highland area. Although some scenic refreshment will be necessary (Allan always said he didn't do well on scenery) the electricians are meticulous and a product of Allan's experience as a pre-digital BT engineer. Although like Monsal it won't be possible to erect this layout in its entirety in the club, we expect it and Binns to be great assets at exhibitions after the duration. Last month I talked a bit about the activities of our garden railwaymen. During this summer we hope to have a 45mm, electrified garden railway active at

Eastbank Lane Station on which any club member can run track or battery powered trains – even steam if it can cope with radius 1 curves. This may prove a boon to those members with visual impairments. Working outside gives better light and the larger scale makes it easy to deal with couplings as Norman, our deceased former exhibition manager, found when he got macular degeneration and couldn't manage N gauge any more . LGB and Bachmann do a large range of Continental and North American prototypes which will run straight out of the box. Sadly nothing British at present, but there are always kits for rolling stock, and clever RTR conversions can be made. But I am also opening my own garden railway on every Tuesday for the Summer. There are some pictures here of the last two Tuesdays:-

<https://www.railwaygardener.co.uk/Garden-railways/Porthmadog-Llyn-Railway/2021-GOLstices/>

This is how it will work. There are up to five permanent railway gardeners who will bring the rolling stock and engines, but not all are available every week. At present with the rule of six it is only feasible to accommodate a small number of additional members but if you want to come, text or Whatsapp 07748760686 the day before and I will give you joining instructions. The garden trains will run between 1100 and 1700 depending on the weather. It will be a strictly outdoor event with an urn for teas and



coffees (or hot sugared water, Mick) in the summer house. If it is rainy then we may only start in the afternoon. Bring your own butties, but my wife Fiona has promised a cake or scones in the afternoon (she is still working full time). If you are able to come, expect to be offered the chance to drive engines remotely both electric and steam – it is very much a hands on experience which is possible with smaller numbers!

Here is a picture of Dolgoch resplendent in her brown livery at Towyn yesterday:-

Where's Andrew?



There were no answers for last month's picture, I was at the Embsay and Bolton Abbey steam railway, although there was a correct answer to the photo I posted on WhatsApp ... well done John Howard ... I was at Haworth, while the station used for filming many scenes of "The Railway Children" was just one station down the line at Oakworth.

This month, I am at a coastal town which at one time boasted FIVE funicular railways, two of which still exist and are in regular use, while a third has a new life, repurposed as a cafe, with the two cars fixed at the upper station, providing space for tables and chairs.

Pirates!



Derek Pratt

At the SMRS Zoom meeting (my 3rd of the day!) I mentioned I was in the process of building a Playmobil castle. Such was the apathy shown that I never got the chance to expand further, so the newsletter beckons.

The West Lancashire Light Railway is trying out a new special event this year, a Princess and Pirates Day. Children (and adults if they're so inclined) will be encouraged to come in appropriate non-gender-specific costumes and join in with various themed activities. What these will be is still under development - splurge cannons, water bombs and communal hostage-taking being three of the more sensible ideas. My contribution is likely to be running the in-house 16mm layout 'Hundred End' with appropriate piratical decoration. Pirate Lego was one option, with the advantage that Son No.1 (of 5) still has quantities of the stuff in garage No.2 (of 3). However it's a bit small, so Playmobil might fit the scale better, with eBay a ready source of suitable cast-off figures.

For buildings, a search of Thingiverse (other 3D print repositories are available) threw up the files for a complete castle. After downloading and virtual slicing to generate the gcode (written as if I know what this means) I tried printing eight sections of wall, four towers and an environmentally-friendly open-air dungeon. Many, many hours and a complete reel of silver-coloured filament later, I had the essentials of a castle ready for painting and gluing to a plastic-sheet baseboard.

The central keep still needs a lower section, but that's a 12-hour print scheduled for tomorrow. I made another four smaller towers for dotting around the landscape, and some minor but essential accessories such as feasting tables, quaffing pots and strawberry cakes. Much to my surprise, it all fitted together quite well, and looked the part when leased to some Playmobil pirates. To be honest, they just sort of took it over really - plastic mini-swords can be surprisingly sharp. Mortgaging-with-menaces one might call it. No doubt some of the pirates will want to play trains, and abscond with a half-dozen or so beautiful princesses locked in the carriages. However at least they've got somewhere to stay for their overnight yo-ho-hoing.

Too good for children I hear you say - don't know they're born, etc. The date is Sunday 11th July - put it in your diary now!

The Class 502 Preservation Trust **Tony Kuivala**

In early 2021 we joined the Heritage Railway Association. The access to briefing papers, technical reports and standards, legal and statutory updates plus networking opportunities is tremendous apart from registering our presence on a countrywide basis. These words and images were prepared at their request to be published in their next Newsletter.

The Class 502 Electrical Multiple Unit was a groundbreaking design by London Midland and Scottish Railway in the 1930's. Upon withdrawal in 1980 our unit became part of the National Collection in care of the National Railway Museum. It is a unique part of British Railway history and also an integral part of the story of electric traction on Merseyside.

Friends of the 502 Group were formed in autumn 2007 in response to news that the unit was deteriorating in open storage at MOD Kineton. NRM appointed us as Custodians and the unit moved to Tebay in May 2009. In mid 2011 we were offered and accepted ownership which was formally handed over on 29th October 2011. On 03rd and 04th March 2012 we organised (and funded) a move to secure and dry undercover accommodation within the facilities of Merseyside Transport Trust Burscough L40 8TG.

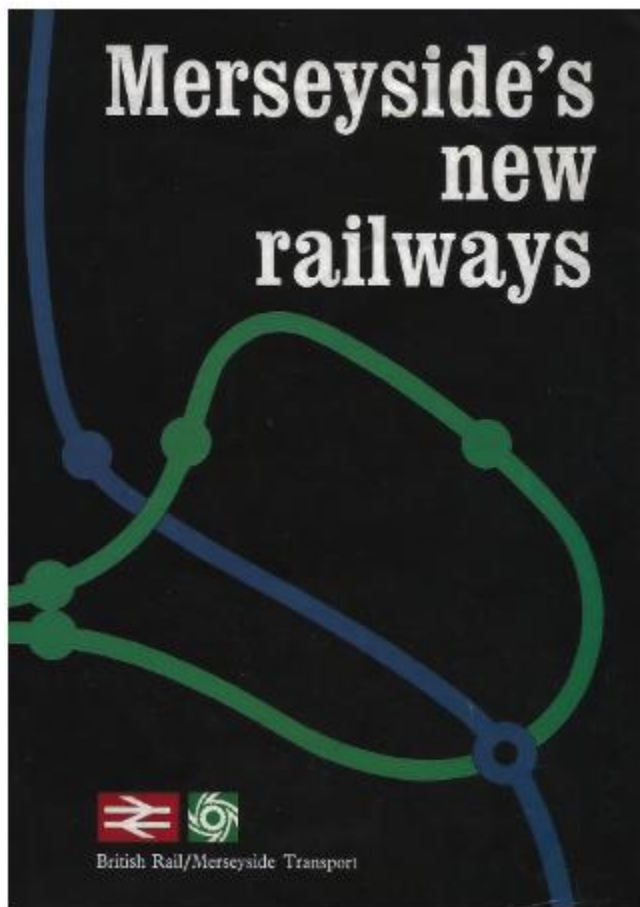
There we reassessed overall condition and decided to prioritise remedial stabilisation of Driving Trailer (29896) Trailer car. Motor Brake Second (28361) became the safe repository of the irreplaceable spares. Much of the external steel body panels have been replaced around the saloon area, chassis/underframe area cleaned, window units re-fitted, new flooring, and the internal wood panels replaced/refurbished. The first stage of rear compartment restoration was concluded at a point where the final floor surface could be laid. The roof space is left open for installation of electrical services at a later time. The corroded front cab section has been the subject of a major rebuild. Careful measurements were made, and many photographs taken as reference points/aids, to ensure the rebuilt cab is indistinguishable from the original. Whilst the cab end was stripped away, all other corrosion areas were dealt with, and protective paint applied over the areas made good. All the badly corroded steel work from one side of the passenger bay was removed and replaced.

We are a small dedicated group who receive no exterior funding. Everything we undertake is funded from Memberships, sales at public exhibitions and events and generous donations from supporters. As an organisation we have now matured sufficiently to make proactive action to secure the future of the 502. We are at the point of submitting our application for Charitable Status to Charity Commission. This includes a change of title to The Class 502

Preservation Trust as agreed at our Annual General Meeting on 16th February 2020.

502 and Merseyrail 50th Anniversary

The Project started from a casual discussion between ourselves in early January and has mushroomed productively since as a side benefit to the limits placed on us all through Lockdown which provided the time and opportunity.



The Merseyrail brand is 50 years old in 2021. The Merseyrail branding started to be applied to the Wirral 503's in October 1971, with a general roll-out through the system (502's, Posters, Signs, Timetables etc) through into 1972. With such an important milestone, and with the 502 being part of that history, we discussed internally how the group should commemorate the anniversary. Firstly, we are preparing words with supporting images and period ephemera, to produce a high quality booklet type publication circa 50 pages. This will also have a major section on the nucleus of the system – the Loop & Link. John Ryan, who was involved with the construction from start to finish, is providing images and a narrative

for inclusion.

The booklet will be a celebration of the Merseyrail brand/system over the last 50 years, and is not intended to be the history of railways in the area. Our publication will have masses of full colour images and material not previously published but available to us.

Merseyrail are fully aware and supportive of the project and we as a group will be fortunate to have the privilege of working with them to help to celebrate/commemorate the anniversary. The booklet should have the title something like - 'Merseyrail 50 Years of Progress - 1971-2021'. It is intended that we should be able to raise additional funds by selling copies online and at exhibitions/open days etc, when we are able to take the sales stand out and about again. It is important to remember that it is Merseyrail's Anniversary, and what we are producing is a positive celebration and record of achievement of 50 years rather than a history.

Secondly, it may be possible in the future for us to have period items about the system (images and ephemera) that can be part of displays at Exhibitions and other venues including stations as appropriate. Our involvement with the 50th Anniversary project will give us as a group, much goodwill, publicity and importantly an opportunity to raise some funds. Additionally, there are some other ongoing projects for the Anniversary that we as a group will be involved with – more to follow at a later date when we have confirmed details with Merseyrail.

At present we possess more than enough unpublished material to fill two booklets, the big question now is not what to include but what to leave aside.

Map image – Matt Wengh

Tunnel image – Author unknown/Paul Gorton

Words courtesy of The Class 502 Preservation Trust April 2021

Lynton & Lynmouth Cliff Railway **Ian**
Shulver

A few days ago, there was a short article in a magazine that I was reading about the Lynton and Lynmouth Cliff Railway – I suspect an advertising feature. It piqued my interest since I have always been intrigued by this (and other cliff railways) ever since I was introduced to it over sixty-five years ago. In fact, I did make a start on modelling a cliff railway in 4mm some years ago, hoping to make it work using waterpower in much the same way that the one at Lynton did. I got part way there with the mechanics but filling and emptying the water tanks defeated me at the time. I also did not appreciate how powerful surface tension was – this is one

physical property that cannot easily be scaled. Perhaps another attempt is in the offing.



Getty Images -166721656

Anyway, back to the real Lynton & Lynmouth Cliff Railway which is unique in being the only fully water powered railway in the UK, with only two others in the world - the Elevador do Bom Jesus in Braga, Portugal built in 1882 and the Funiculaire Neuveville-St.Pierre in Fribourg, Switzerland built in 1899. Most Cliff Railways in the UK, and the world, require electrical power for operation or for re-pumping water. Lifts such as Saltburn Cliff Lift and the Folkestone Leas Cliff Lift have encapsulated water powered systems which means that they need electric motors to re-pump the water back to the top to be used again.

In the 19th century, the high cliffs separating Lynton from Lynmouth were a major obstacle to economic development. The twin villages mainly relied upon sea transport because land travel over Exmoor

was extremely difficult. Coal, lime, foodstuffs, and other essentials arrived at Lynmouth in sailing vessels, but this freight had to be carried by packhorses or in horse drawn carts up the steep hill to Lynton. The cliffs also posed problems for the growing tourist industry. From the mid 1820's holiday makers began to arrive at Lynmouth on paddle steamers from Bristol, Swansea, and other Bristol Channel ports. However, a daunting hill faced those who decided to walk up to Lynton.

It was in December 1881 that a novel solution to the problem was first given a public airing when "The Lynton and Lynmouth Recorder" received a letter, signed only with a nom-de-plume, Pro Bono Publico, proposing "A tramway between the two towns to be worked by a stationary engine at Lynton, the motive power being taken from the river Lyn, put in tanks on rolling carriages and these let down the tramway under proper control. The weight of the water going down would, with the application of simple machinery,

bring up anything that might be desired up from Lynmouth". However, the solution it would require a large capital investment and for some years it remained nothing more than a talking point.

However, late in 1885, a major project was proposed which included the construction of a solid pier, an esplanade and 'a lift from the pier or promenade to Lynton'. The pier was intended to enable the resort to attract a bigger share of the growing steam-excursion traffic. Many of the paddle steamers visited Ilfracombe rather than calling at Lynmouth where passengers had to be ferried ashore in small boats. The proposed 'lift' would make it possible to carry up to Lynton the large numbers of people that would be landed from the steamers at the new pier. The Cliff Railway was to be the second part of the scheme.



Getty images -175247564

Thomas Hewitt & John Heywood, two quite different men, co-promoted the scheme. Hewitt was a distinguished London lawyer with a Lynton residence and used his legal skills to guide a bill, "The Lynmouth Promenade, Pier and Lift Provisional Order", through Parliament, receiving official sanction in October 1886.

Heywood on the other hand, was a self-made local businessman, being Chairman of the Lynton Local Board.

One Sir George Newnes, a businessman and publisher (founded *Tit-Bits* in 1881 – only those of a certain age will remember this journal, and also went on to promote the Lynton and Barnstaple Railway, the Bridgnorth Cliff Railway and the Clifton Rocks Railway) agreed to put up most of the capital. This project appealed to him since he was interested in the proposals and schemes which met a public need and yet were likely to make him a handsome profit. Bob Jones, a partner in the Lynton building firm responsible for the construction of the esplanade, and Thomas Hewitt also invested in the project and became fellow directors. Jones recommended his sister's son, George Marks, an engineer with the skills needed to advise on the project (Marks went on to build the Bridgnorth Cliff Railway).

George Marks realised that due to the extreme length (some 900 feet) and rising over 500 feet vertically at an incline of 1:1.75, he would need to seriously assess the safety aspect, particularly the braking system which would have to be far more advanced than those normally used on funicular lifts. He decided on four separate systems. Two were to be friction brakes, sets of steel blocks that are pressed down on to the crown of the rail by hydraulic pistons. The remaining two systems, which would constitute the main system, were to be hydraulic callipers, which clamped across the crown of the rails. This system was eventually patented in the names of Newnes, Jones and Marks in 1888. The Hydraulic braking system was to be filled with water and not oil, which was later to become unique to this lift. To this day the brakes of this Cliff Railway are still fully water powered.

Work began on construction in 1887 and it took less than three years to complete, a remarkable achievement considering that the entire excavation relied on manual labour. The Cliff Railway was finally opened on Easter Monday (the 7th of April) in 1890 with a large crowd gathering at the Lynton station to see Mrs Jeune, Lady of the Manor of Lynton, perform the official ceremony.

The railway works on a simple balancing principle. The two cars are permanently attached to each other by hauling cables that run around a 5ft 6" pulley wheel at the top and the bottom of the tracks. There are four cables in total; two hauling cables that carry the weight of the cars and two tail balancing cables that counteract the weight of the hauling cables.

When each car is 'docked' with full water tanks the cars are in balance and are ready for loading. Each tank holds 700 gallons of water. As passengers board, variations are accommodated for by the brakes which clamp the cars to the rails. Each car's brakes will hold the weight of both cars fully laden, and the lower car has a water operated locking device which clamps the car to the bottom station. The company was formed in 1888 through an act of Parliament with perpetual rights to extract water from the West Lyn River, more than a mile away, passing through 5" pipes to the top station holding tanks. The water used is not polluted in any way, simply used as ballast, and is discharged onto the beach at Lynmouth about 100 metres away from the river from which it was taken and so is truly "eco-friendly".

When loaded, the drivers use pre-arranged bell signals, unlock the safety lock, and release the brakes. The lower driver discharges water until the top car is heavier. Sometimes this is achieved with the weight of passengers

alone and no water is used. The top car then rolls down the rails pulling the lower car up.

Each car has two sets of water operated brakes. The 'governor', which in turn, is driven by the main wheels, operates one set. The brake shoes press down on the top surface of the rail and lift the car off the rail by 2mm, thereby using the weight of the car to provide friction between the rail and the brake shoes. The other set of brakes work in reverse to a conventional brake system, the brakes are permanently on and operated by a large water accumulator via the driver's hand wheel 'The Deadman's Handle'. This means when the cars are unattended, the brakes clamp it to the rails making it impossible to move under any circumstances and the driver must hold the brakes off during the journey.

N Gauge, upstairs.

Albert Hancy

A couple of photographs from Al Hancy of his N Gauge layout, which is not complete (but are they ever? - Ed)





Merseyrail for Chinese TV Advert

Mike Sharples

On 16th of Feb 2021 508104 + 507026 on platform 1 at Southport were hired to a film Company to make a TV ad for a Chinese mobile phone network. The track side windows where blacked out and adverts were changed to American style.



And Finally...

Duck tape, or to most people duct tape

Ian Shulver

Everyone knows of this ubiquitous tape, being used for everything from sealing pipes and ducts (hence its name in common parlance) to wrapping parcels and general household repairs, and, believe it or not, in the treatment of warts. But do you know its origins?

In 1943, Vesla Stroudt wrote to Franklin D Roosevelt with an idea to seal ammunition boxes with a fabric tape that she had tested in the ordnance factory where she worked. She was a mother of two navy sailors and was worried that problems with ammunition box seals would cost precious time in the heat of battle. This was forwarded to the War Production Board who farmed its development out to Johnson & Johnson who had some experience and knowledge of fabric based medical tapes. The new tape was specifically designed to be ripped by hand rather than cut with scissors or a knife. Their product was made of thin cotton duck coated in waterproof polyethylene with a layer of rubber-based grey adhesive bonded to one side. It was easy to apply and remove, and was soon adapted to repair military equipment quickly, including vehicles and weapons and was coloured a standard matte olive drab. It was widely used by soldiers and after the war, the duck tape product was sold in hardware stores for household repairs.

During the 1950's the tape was commonly used for wrapping air ducts, hence the name "duct tape" came into common usage and the colour of the tape changed to a silvery grey to match tin ductwork. The name "Ductape" was trademarked but following company ownership changes, it was decided to rebrand as Duck Tape to reflect its heritage. So, you can quite properly use either duck tape or duct tape for this very useful product without attracting the ire of purists.