Risborough and District Model Railway Club

Apr-Jun 2019 Spring

FOOTPLATE

WELCOME

Welcome to the Spring issue of Footplate.

Risex was busier than last year, (provisional figures: attendance 566 adults and 68 children; with a financial surplus of £1500). There was a good selection of layouts and the quality was very good too. Adrian has decided to stand down as Risex Manager and I would like to thank him for his important contribution to the club and it's income, Risex is a very reliable event. We now have a new Risex Manager, Mark Bacon, who we welcome on board. Mark has been an exhibition manager in the past and we are confident that he will put on a great show.

The proposed building development at the Community Centre could have implications for Risex 2020. It is not yet known when this will start or how long it will take, but once complete would allow a bigger or at least better arranged Risex. The Trustees will explore alternative venues on a contingency basis.

We have had 2 workshops: LEDs in February and Trees in March, both well

attended and they have received good feedback. I am now organising a Friday evening session on resin casting for May.

Our next event is Wheeltapper (26th April), with Guest Judge and Speaker Kevin Wilson who built the layout Bucks Hill. So get those models finished and lets put on a great display. This is followed in May by Railex.

I have now cleaned out the dust from the sander and fitted new finer abrasives which are better for model making. Please always attach the vacuum cleaner before use.

Thanks to Gary we now have a YouTube channel. The channel has had nearly 400 hits and boasts 11 subscribers; more welcome. Currently, there are 3 videos and more will be added over the year covering all our club activities.

Risborough & District Model Railway Club's New YouTube Channel   Click Here

Paul

From the Internet

SR 926 'Repton' on the Nene Valley Railway - 2019
https://www.youtube.com/watch?v=hqE8rEyD_2Y

Keighley and Worth Valley Railway, Spring Steam Gala 2019, Saturday 9th March
https://www.youtube.com/watch?v=5aapbzVJoEQ

The Launch of 6989 'Wightwick Hall' at the Buckinghamshire Railway Centre, 2019
https://www.youtube.com/watch?v=OWgftDsWitY

35018 'British India Line' Blows Off Up Shap - Winter Cumbrian Mountain Express, 2019
https://www.youtube.com/watch?v=FETTRzGeOHc

Front cover: the new Metro line M52 at Amsterdam Noord. This is the first metro station north of the Ij and was opened in August 2018. From Noord, it goes under the Ij to Amsterdam Centraal and then on to Amsterdam Zuid where it connects to the M50 & M51 as well as the NS system. Photo by Paul.

Atchison Topeka & Santa Fe 2926

Introduction

One hot Saturday afternoon last September I found myself, as a result of a chance conversation with a fellow railway enthusiast in Santa Fe station that same morning, in an old sawmill yard in Albuquerque New Mexico where restoration of a magnificent steam locomotive was nearing completion after many years of dedicated effort. The engine in question is owned by the New Mexico Steam Locomotive & Railroad Historical Society whose intention at the time I visited them was to have it fully operational by the end of 2018, boiler and superheater certification having already been obtained earlier in the year.

Brief description of 2926

2926 is a class 2900 locomotive built towards the end of the Second World War for the Atchison, Topeka and Santa Fe Railroad (AT&SF) for passenger and fast freight services. These were the last steam locomotives built for passenger services for the AT&SF. The loco wheel arrangement is 4-8-4 with cast steel disc wheels for the front bogie and the rear truck and Boxpok[1] wheels for the drivers. The tender runs on a pair of three axle bogies with cast wheels. Timken roller bearings were fitted to all bearings on the locomotive and tender – and I do mean all bearings as the large bosses on the coupling rods housed roller bearing cages to reduce friction on the crank pins.

I shall provide vital statistics in imperial rather than metric form as that just seems more appropriate for something built in the 1940s… there is a translation to metric and SI units at the end of the article for the *modernistas*. The locomotive is built to run on the standard gauge, the combined length of loco and tender is 120' 10", loco weight in working order is 227t 15cwt, driving wheels are 6' 8" diameter, tender fuel oil capacity is 5,800 gallons and water capacity is 20,400 gallons.
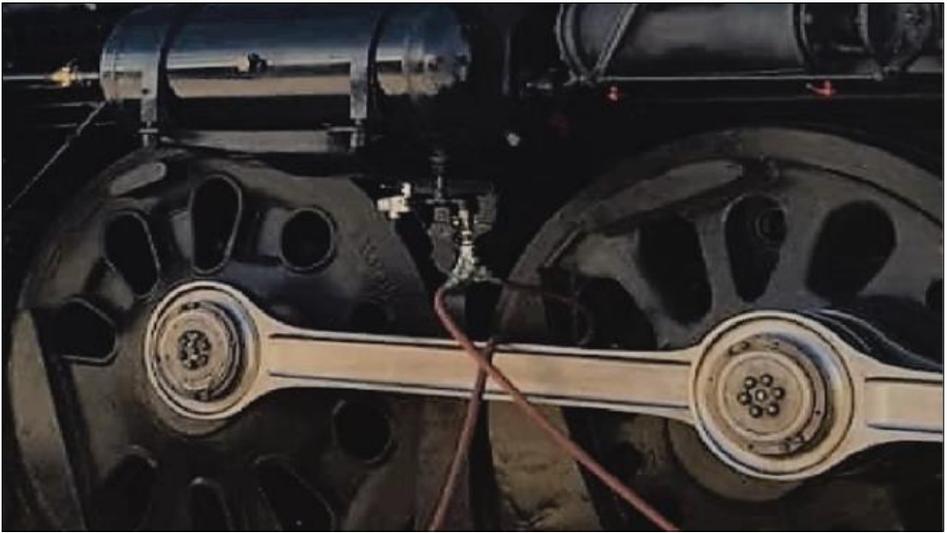
Coupling rod roller bearings and Boxpok wheels

The firebox grate area is 108ft^2 and because of its size oil-firing was chosen as the most practical method of heating the boiler water. The heating surface of the firebox including the combustion chamber is 124ft^2 and thermic syphons account for a further 30.5ft^2 of heating surface.

Renovated firebox showing new firebricks and thermic syphons

Drafting follows conventional practice except that 2926 also possesses the refinement of a variable height chimney or smokestack encased in a diamond pantograph which can be raised or lowered to take account of different steaming and loading gauge requirements. There is a YouTube link to a short movie clearly illustrating its operation: *https://www.youtube.com/watch?v=OUZlCAQ-59Q*

In normal use the boiler is pressed to 300 psi although to conform with US Department of Transport testing requirements for a boiler certificate it was run at 25% over pressure for four hours during the official steam test that took place in August 2018. It passed – nothing exploded! Water for the boiler is brought from the tender by a low pressure, low speed centrifugal pump to a Worthington type 6-SA feedwater heater which is situated just above and behind the smokebox on the left side of the boiler. After being mixed with exhaust steam, the heated water then falls by gravity to a steam turbine and centrifugal feedwater pump combined in a single assembly just above and behind the left-hand valve chest. The usual speed of this pump when running at full capacity is 3,600 rpm. Feedwater pump speed, the steam that runs the pump and cold water flow are manged by a float in the Worthington feedwater heater unit.

The passage of steam to the cylinders is controlled by an American Multiple Throttle – this is, unsurprisingly, a multi-valve regulator manufactured in the US – that progressively opens a series of valves as greater steam flow is required. These valves are located in the smokebox at the superheater header rather than under a steam dome. Siting the regulator at the end of the steam collector pipe and distant from the boiler water surface reduces the effect of a sudden localised pressure drop in the boiler when the regulator is opened and this in turn diminishes the risk of priming or carry-over of water to the superheater and cylinders[3]. Superheater heating area is 2,366ft^2 and the superheater tubes were hydrostatically tested to 500 psi before installation. I wonder what they were expecting that required that kind of pressure test. I was unable to ascertain exactly the temperature of the superheated steam; NMSL&RHS claim "near

Fireman's side of the cab complete with comfy chair.

700°F" on their website but it is not unreasonable to assume it to be ≈680°F as this is the temperature found on other large locomotives from the same builder. Perhaps now is a suitable point for a quiz question: what is the connection between 2926's boiler tubes and its cowcatcher? You must read to the end to find out.

The superheated steam eventually finds its way via 15" piston valves operated by Walschaerts valve gear to two enormous outside cylinders of 28" diameter by 32" stroke and the tractive effort produced at 85% of rated boiler pressure even with large driving wheels is a hefty 79,968 lbf[4]. To reduce the possibility of wheel slip, cut-off was mechanically limited to 60% when starting. In theory this kept the tractive effort within the realm of what the adhesive weight could handle

Inside the cab of 2926. The bare metal panel to my left is the mounting plate for the GPS speedometer which will be fitted before 2926 takes to Amtrak rails. It appears that Amtrak don't trust the original cable driven speedometer which none the less will still be left on the locomotive.

Brief history of 2926
2926 is one of the "Northern" 4-8-4s which were built in four batches for the AT&SF at the Baldwin Locomotive Works, Eddystone, PA. It was built during 1944 and formed part of the final batch of 30 locomotives as works number 69814. Each batch had certain differences, some greater, some lesser, for example, driving wheel diameter, type of valve gear (*Valve gear was either Walschaerts or, rather more interestingly on some of class 3761, British Caprotti which was later replaced with Walschaerts*), firebox size, fuel type, number of tubes, *etc.,* and were therefore regarded as different

classes. Having said that, class 2900 locos were essentially built to the design of the 1938 batch (designated as class 3765) but because of wartime restrictions some of the parts were manufactured from different and heavier metals resulting from the lack of high-tensile alloys and consequently the 2900s weighed in as the heaviest of the "Northerns". The final batch had consecutive running numbers (2900-29) and so it can be seen that 2926 was one of the last to be completed. In a sad parallel to many of the BR standards it had a somewhat curtailed working life, last being run in revenue earning service in 1953 and eventually retired in 1956 having covered over one million miles.

Initially, wartime requirements saw the 2900s on freight trains rather than the fast passenger services for which they had been intended but after the war they were eventually assigned to haul the *Scout* and the *Grand Canyon Limited* for the remainder of their short lives.

2926 in preservation
In 1956, AT&SF donated 2926 to the town of Albuquerque in honour of the 250th anniversary of the founding of the city. The locomotive and tender were put on public display in the town's Coronado Park where they remained for 44 years. However, these years of exposure to the elements took their toll in the inevitable appearance of rust, peeling paint and exposure of asbestos and the sorry state into which 2926 had descended by the turn of the century prompted a group of local railroad enthusiasts to form the New Mexico Steam Locomotive & Railroad Historical Society (http://www.nmslrhs.org/). The objective of the Society was to restore the locomotive to its full operating capability in line with modern safety requirements and to its full cosmetic glory. Consequently, a bid was made for the locomotive and tender and for the sum of $1.00 these were purchased from the municipality and removed from the park in 2000. The group are still the owners and restorers of 2926 and in conjunction with Amtrak will be its future operators on the main line. As mentioned earlier, the locomotive is currently stored and being worked on at the old sawmill yard at Albuquerque which is a spur off the Burlington Northern Santa Fe road. As of January 2019 a few minor last-minute snags have delayed the stated plan to have the locomotive fully operational by December 2018; the Society website has the latest information.

As you walk down past the shed into the open area of the yard where most of the work is undertaken in the balmy New Mexico summer weather two things immediately strike you: firstly, the immense size of the locomotive in comparison with even our largest UK locos, and secondly the powerful visual impact of the unlined high gloss black livery in the bright sunlight. The effect is so impressive that it is hardly noticeable that there is still some cosmetic work to be done in the application of cladding to the cylinders and valve chests, to one of the Westinghouse pumps and to parts of the firebox sides. Under further scrutiny it can be seen too that the piston rods are not connected to the crossheads; this is for insurance reasons because while the locomotive is incapable of autonomous movement insurance premiums are around a quarter of what will eventually be required to be paid.

All the work so far has been undertaken by volunteers, usually members of the NML&RH Society, but others have also been welcomed to help in the task of restoration on an *ad hoc* basis or as paid sub-contractors. As far as was practical and

safe, as much as possible was restored from the original constituent parts of the locomotive through the engineering skills of the Society members although it was inevitable that certain items had to be externally sourced, for example, boiler preparation by Welch's Boiler Service, manufacture of new gauge glasses to replace the installed ones which were no longer viewed as being safe, new firebricks, a new headlamp, a feedwater pressure gauge (from eBay!) and, of course, although the members have access to a large array of tools and to smaller lathes, there was no suitable heavy machinery in the sawmill yard for bigger tasks such as wheel turning. Additionally, as the restoration of 2926 is to culminate in being a public benefit, the US Department of Transport oversees, and where necessary certifies, items crucial to safe usage and running, the boiler being an obvious example. Amtrak too has an interest in

Note the cowcatcher.

ensuring that 2926 will be suitable for operating on its tracks and to that end has close links with the restoration group. If I understood correctly what was said to me, Amtrak will also undertake to meet a part of the insurance costs when the loco runs on its public rails. NML&RHS see their progress to date as only, to coin a phrase, the end of the beginning, as the long-running restoration period is but a prelude to the time when the Society will become the maintainers and long-term custodians of this magnificent piece of engineering.

Now, the boiler tubes and cowcatcher question… when it was decided that a new cowcatcher was needed, condemned tubes from 2926 were recycled to fabricate it and this manufacturing exercise doubled as a training course for the Society's would-be volunteer welders. An excellent example of killing two birds with one stone that appeals to my Scottish thriftiness.

Before I had the opportunity of visiting Albuquerque and seeing 2926 first hand, American locomotives had been a complete and, I must confess, not very

interesting mystery to me. However, there is nothing to compare with the zeal of the converted and I am now paying some overdue attention to American railroads. And so, I would encourage you, should you ever visit Albuquerque and are able to tear yourself away from your pint of Smithwick's at O'Neill's bar, to visit the NMSL&RHS yard, their wonderful locomotive and their shop that generates a modest income from the sale of calendars, t-shirts, baseball caps, photographs, *etc*. I can safely say that you will be very cheerfully welcomed by the Society's volunteers and you will while away a very enjoyable and instructive few hours.

2926 in SI/metric units
    combined length of locomotive and tender: 36.83m
    loco weight in working order: 231,405kg
    driving wheel diameter: 2.03m
    tender fuel oil capacity: 26,367l
    tender water capacity: 92,740l
    firebox grate area: $10.03m^2$
    heating surface of firebox including combustion chamber: $11.52m^2$
    heating surface of thermic syphons: $2.83m^2$
    boiler pressure: 2,068.43kPa
    superheater heating area: $219.8m^2$
    piston valve diameter: 38.1cm
    piston diameter x stroke: 71.1cm x 81.3cm
    tractive effort at 85% boiler pressure: 350kN
    assumed steam superheat temperature: ≈360°C

Notes:

The Boxpok (BOX sPOKe) wheel was a patent of General Steel Castings of Illinois. The manufacturing process is ingeniously contrived to make large parts of the rim and all the spokes hollow. This is reputed to reduce the potential for distortion, save weight over same diameter spoked wheels and to lend itself to finer balancing for high speed running. As an aside, the wheels used on O.V.S. Bulleid's locomotives are visually similar to and often referred to as Boxpok but are in fact Bullied Firth Brown (BFB) solid castings and therefore, self-evidently, without cavities.

In the UK, it was GWR practice to locate the regulator valve in the smokebox of domeless boilers. Stanier continued the Swindon tradition on his early domeless LMS boilers but it was not long before he adopted the Midland convention of siting the regulator under the steam dome. Later, BR resurrected the concept for the standard Pacifics but, despite the apparent operational benefit, it was not something that was taken up widely in this country.

For comparison, tractive efforts of some larger UK locomotive at 85% bp as quoted by Ian Allan: Princess Coronation: 40,000 lbf, A4: 35,455 lbf, Merchant Navy: 33,495 lbf, King: 39,700 lbf, BR standard 9F: 39,667 lbf.

Neil M.

Making laser cut card kits

Markenburg are a Dutch company that produce some of the better laser cut kits. They have a large and growing range which are copies of real buildings in the Netherlands, available in HO, N and some in Z scale. They also have a free sample kit of a portable building suitable for building sites etc. Making this building was a good way to see how the professional kit designers go about making a kit.

Markenburg use a 1mm grey card core for the structure with tabs for alignment. This is then covered by the coloured layer(s) which is a thin card/thick paper in an appropriate colour. This is clearly seen in the photo below:
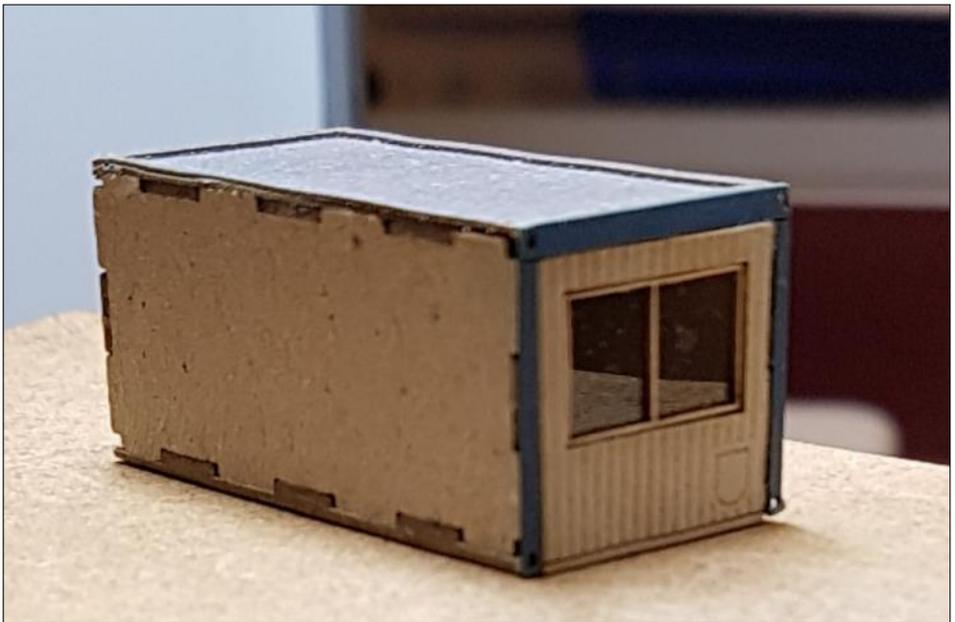
What I found when building this is that the PVA has too much grip when adding the paper layer and you cannot move it easily. To solve this I painted the grey card with diluted PVA to give a partial seal to the surface. This then allows the paper layer to be moved as it is applied to get a better alignment. The other tip is to glue the parts forming the side together with a very small drop of PVA before fitting, this gives a better fit of the blue frame to the grey panels. I have a few more simple kits to build and would consider these for background buildings.

https://www.markenburg.nl/

Paul

Club Workshops

We have help 2 workshop since the last edition of Footplate. Mick gave a workshop on the use of LEDs in models (below) and Paul gave a workshop on tree making. Both were well attended and we have received good feedback from the participants. We will be running more workshops throughout the year, let us know if there is a particular subject you are interested in. Photos by Paul.

Right: Steve is
finishing his Scots
Pine with a bit of
pruning.

Left: Steve adds the bark to his
Scots Pine using Greenscene Flexi-
Bark.

Articles for Publication in Footplate

Articles should be sent at least 1 month before publication dates, i.e. beginning
of March, June, September and December for publication in April, July,
October and January. Plain text, no formatting, photos as large as possible.

What is DecoderPro?

Quite simply, for the DCC user, it is yet another part of the freedom that DCC brings to a model railroad. Those of you who use DCC already know that DCC has freed you from cab control's block switches and from the one-size-fits-all DC controller where one controller has to work with every locomotive, and how all that enables much more prototypically accurate operations. For those of who don't use DCC, you'll weep at how simple DCC operation really is when you find out. DecoderPro is just another part of that DCC freedom. It is particularly valuable if you have a large roster of sound-equipped locomotives, and you want to get the best from them. There's another part of freedom with DecoderPro, too, and that's the Free bit. It's Open Source, so it's Free to download and use. We'll come back to that.

DecoderPro makes locomotive programming simple, easy, and much more fun that entering and adjusting CVs with a throttle. We all know that programming is not really the correct term for this. It is really the process of setting up the decoder's configuration parameters, by placing appropriate values in the relevant places, or Configuration Variables. DecoderPro does this simply and visually, with selection boxes, sliders or plain numerical entry.

DecoderPro is just one of the many tools in the whole JMRI package. JMRI stands for Java Model Railroad Interface. If you'd not grasped it by now, DecoderPro and JMRI are computer programs, that you run on a computer that is somehow connected to the locomotive that you want to program. As we'll see, that connection may be a stand-alone device, or may be a connection to your layout's DCC system. In that latter case, some of the other tools in the JMRI package may also be of value to you. This article is specifically about getting started with DecoderPro, but we will mention a few of those other tools at the end.

Getting Started
The first thing we need to do is recognise that in this article, I cannot give you a precise set of steps to follow, because I don't know what your starting point is, or even what your end point will be, and, sadly, there are a few traps and pitfalls along the way. But, this is a pathway that many people have trodden before you, which means that there are known answers to just about every question you'll think of asking, and lots more that you'll never get close to. There are complete walkthroughs for the install on the JMRI site at http://jmri.org/help/en/html/setup/index.shtml#install, where there are links to Windows, Mac and Linux installs. Note that only the Mac guide is reasonably up to date, but the Windows one is good enough to show the general flow of the install, though not necessarily all the details.

First place to start is the computer. JMRI requires Java, the J in JMRI. Java is available, free of charge, and runs on Windows, Apple Macs, and various varieties of Linux. Before you ask, no, you cannot use an iPad or iPhone, or any Android devices for DecoderPro, because they don't run Java. You can use a regular PC or laptop running a recent version of Windows (7 and above: 10 works very well), an Apple Mac, or on anything that runs Linux: a PC or Laptop, or even such things as a Raspberry Pi. If you know about those latter things, then you probably don't need much help from me, either. To get going, you're going to download and install stuff

from the Internet, so you need to have an internet connection, and that also means that you need to have some sort of virus and malware protection. By and large, Windows Defender does the job for Windows machines, but if you have something else such as Norton, Sophos, or Kaspersky, it is possible you will need to know how to disable it temporarily to ensure that installations work as expected. When it comes to downloads, always use the correct download sites - the ones I mention here - to be sure that you are downloading the right stuff, too.
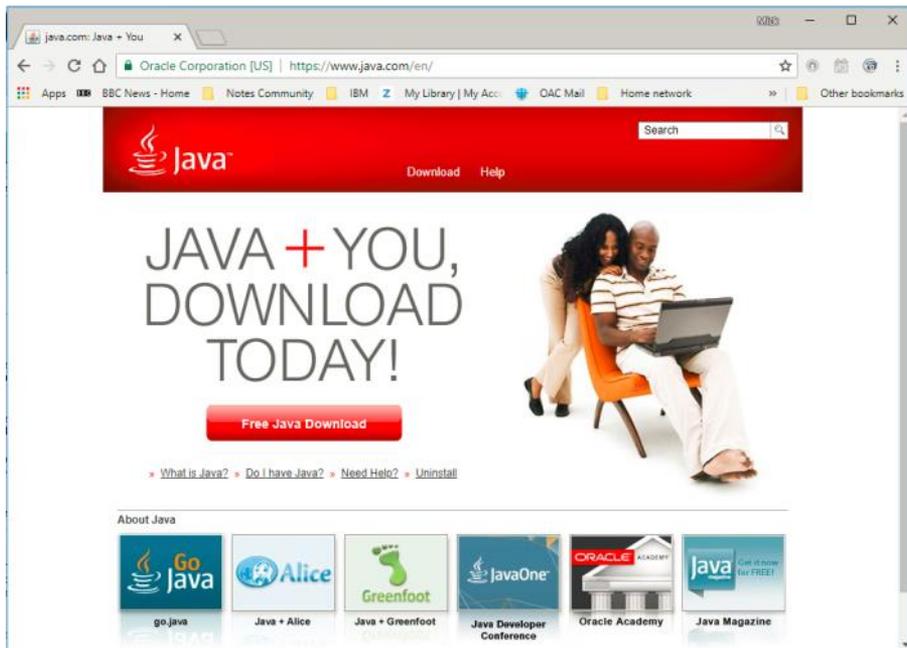
Download and install Java from http://www.java.com, see the screenshot above. Just click the Download button, and you should get the installer downloaded. Run that, and it will install Java, and it should also set up a regular updating process to ensure that your Java is kept up to date with changes from Oracle, it's owner. Do make sure that your Java is version 1.8 or above. JMRI will not work with older versions of Java. By the way, you won't be able to install the current version of Java 1.8 on WindowsXP, so if that is what you have, upgrade it or replace the computer. You can check the version of your installed Java via the Windows control panel icon, or merely from a command prompt by typing java -version.

Next, you go to http://JMRI.org, the homepage of JMRI (page 16). Before doing anything here, I recommend that you read this page. It explains to you what JMRI is, and what the tools and components are, and has links to much of the information that you'll need to get started and get going, and to expand your knowledge. Make a bookmark of this page, because you'll be back to it again, and again.

While we're talking about information about DecoderPro and JMRI, let me digress a little. JMRI is not commercial software, as I mentioned. It's Open Source, which

means that it is free to download and use, and also free for you to modify and share those modifications, if you so choose. Like much open source software, it is built by people who started to do it because they wanted the end result. They're model railroaders who wanted to use a computer to make DCC things simpler, so they got down to it and wrote the code, and we all benefit. Which means that if you like it, do consider a donation: click the Support this Project button on the homepage. Open Source software is rarely formally supported, either, and JMRI/DecoderPro is no different. The best support forum for it is the JMRI group at Groups.IO (page 17), and I strongly recommend joining the JMRI Users group there. Just type JMRI at the search, and it will find the group. You'll almost certainly find that there is also a group for your chosen DCC system, and quite possibly one for your prototype road, too. Groups.IO is a great place to share and learn and ask questions. Use it, if you aren't already.

Next, at http://JMRI.org, look in the left sidebar at Supported Hardware well down at the bottom - noting all the other JMRI tools as you go. Here's where you look at what's required to connect to your locomotive. I say that, because there are really two ways to do that when we're looking at the CV programming perspective.

The first, is to use a stand-alone device that connects computer directly to the loco, with no DCC system involved. The leading device here is the SPROG (http://sprog-dcc.co.uk). This is a box with a USB connection to the computer, some DC power, and two connections that connect to the loco. My SPROG has these two wires terminated in croc clips, so I can just clip it straight to the loco wheels or pickups, though using a short piece of track is a better solution. Digitrax also offer their PR4. This has multiple operating modes, one of which is exactly the same as using a SPROG. They're both in
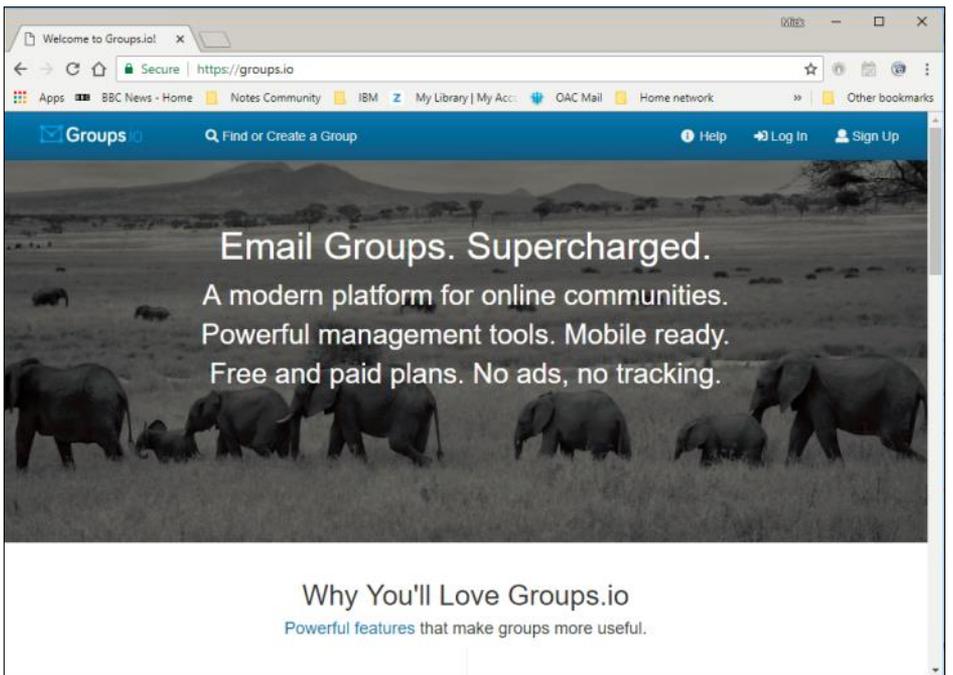
the £60-70 area from the usual dealers, including a suitable power supply. The PR4 comes with one, and the dealer should sell a separate one for the SPROG if you don't already have a suitable wallwart or similar. Just ensure that whatever you use is powerful enough for the SPROG version that you buy.

These devices have the advantage that they don't require that the computer is physically connected to the railway. All you need is the locomotive, so they are great workbench tools. But one of the strengths of DCC programming is POM, Programming on the Main, Ops Mode programming, which most DCC systems support. This enables CV changes to be made to a running locomotive. That can be done on a desktop length of track, but a complete layout makes it easier. To be fair to the SPROG is does have an alternate operating mode that enables it to act as a small command station, and in this mode, it does support Ops mode programming.

Your second choice is to connect the computer to your DCC system, and here you really do need to study the hardware support pages at JMRI.org, as there are some dragons here. Let me call out a few common connection possibilities:

Digitrax: Digitrax's new DCS240 command station supports a direct USB connection. No other hardware is required. It works well and is quite fast. Other Digitrax command stations - DCS100 and Zephyr - will need something that connects the computer to Loconet. The two contenders for this are the Locobuffer and Digitrax's PR4, again. Both work well and are easy to set up. Personally, I'm a Locobuffer user, even though I also have a DCS240.

NCE: here is a minor minefield. For the PowerPro, you need a USB-to-Serial cable to

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connect the computer to the 9-pin serial on the Powerpro box. Don't use the NCE USB connection here as it does not support programming with the PowerPro, However, if you have a PowerCab, or one of its derivatives, you must use the NCE USB connector here as it is the only thing that works with the PowerCab.

Lenz and other Xpressnet systems: I've successfully connected with a LI-USB to these. Some, such as Hornby's Elite system, have a USB built in. In the Elite case, that is the only part of the Elite I can recommend, the rest of it is just far too awful to use.

Gaugemaster/MRC: use the relevant USB interface. I have no experience with this, but I hear that it is simple to set up and works as expected. Do check the limitations noted on the JMRI hardware page for your system. Not all DCC systems can do everything you might want to do via a connected computer. For example, the ZTC 511 won't do programming operations from a computer.

Get the hardware you need ordered up, as there is little you can do with DecoderPro without it. When you get it, install it following the manufactures instructions; do that carefully and to the letter. I cannot tell you how much time I have wasted getting other people's failed hardware installations working and I have to say here that SPROGs and Locobuffers are far easier to get installed and working than anything else.

Right, now let's get DecoderPro downloaded and installed. JMRI almost always has two, or even three versions. From the JMRI.Org page, select the Download page. This shows the current production version, which is 4.12 when this article is published. There are also test versions available, and these have the advantage that if you have a new decoder, as in a new product decoder, the current production version may not have a definition for it if the decoder came out after the JMRI version, but the latest test version may have one. As an aside, remember I said that JMRI is created by modelers for modelers? That goes for the decoder definitions, too - they're created by us hobbyists, and not often by the decoder manufacturers themselves. So, there can often be a lag between a decoder coming out and JMRI supporting it, because someone has to buy one, read the manual, create the definition and test it, before committing the new definition in to the next JMRI release. If you are happy to take the small risk that a test version may break something else that you use, test versions are good things to use, especially if you are able to point out issues to the developers. The best way to do that is raise a question at JMRI Users on Groups.IO.

So, click on the appropriate link and download JMRI. Once downloaded, run it, to do the install. I recommend taking all the defaults offered, as this is simplest for your first install. It also makes updating it later easier too. Now, it is possible that your Virus Checker may disrupt the install: be sure when it is complete that you have at least the DecoderPro icon (left) on your desktop. If it doesn't appear, turn off your virus checker and try the install again. Don't forget to turn the virus checker back on when you're done.

Once successfully installed, you need to connect it to your hardware. You've already installed the drivers for that, so you're almost ready to go. Before you start it, go back to http://JMRI.org and find the hardware connection page for your hardware, again. It's very likely that there will be a quick walkthru in there of what

the steps are, so get that up on your browser -maybe on your phone or tablet, or even print it out. Then start DecoderPro and get connected. If you're using a SPROG, be sure to select the system choice SPROG, and not SROG Command Station.
Ok, we're back. Simple test if you've connected to a DCC system is to see if you can turn the track power on and off with the computer via the large button at the top middle of the screen - though I'm aware that not all DCC systems support being powered on and off via JMRI. If it does support it, and it works, then you are connected. If you're using a SROG, then go to the SPROG menu pulldown, and select Read SPROG Firmware Version. If that comes back, virtually instantly, with the correct version details, you're connected. You're ready to go.

Next thing to do is to place a loco on your program track, if you're on a DCC system, or on the connected SPROG track. Then at the top right of DecoderPro, click the New Loco button. You'll get displayed a list of decoder manufacturers, and a button at the bottom labelled Read Type from Decoder. Click that, and wait a moment ot two, or maybe a minute or two. While it does its stuff - reading CV8 and then CV7, it will show you progress at the foot of the New Loco dialog box. CV8 and CV7 are the manufacturer and decoder ID buttons. If an error is shown here, you'll need to fix that to proceed - there is a page at http://jmri.org/help/en/html/setup/Errors.shtml which explains the errors you may see and what to do about them.

If all is well, DecoderPro will show you, in the expanded list of decoders, what it has found. For some, you may have to make a detailed selection yourself from the highlighted choices. Then click the button at the bottom right of that dialog box that says Open Advanced Programmer. Ok, it may say something else, but it's still the button at bottom right. You can fix that later in Preferences to ensure that DP always opens at the Advanced set of pages. To do that, it's Edit/Preferences/Roster, click the Programmer tab, then select Advanced from the selection at the top, and click Save. DecoderPro will then need to be restarted,

Once you have that open, my suggestion would then, always, for every loco, to do these steps:
Complete the Roster Entry tab details.   I strongly recommend completing all of the boxes down to and including Model, because these then get listed in the Roster later and will make it easier for you to find locomotive entries again.
The click the Save to Roster button - and you should see the entry appear in the Roster.
Click the Read All Sheets button. If the loco has a sound decoder, this may take a while. You'll see where it is at on the status bar at the foot of the panel.
When it finishes Ok at the foot of the screen, then Save it again. I'd always use the Save to Roster button, because you must use that at least once.

Go take a look at what it has found. Look at each tab, and it will show you, mostly in simple terms, what CV values you have set. Hover over the entries, and it will show a more detailed explanation in a tooltip. Display the CV used to manage the setting in the tooltip by going to Edit/Preferences/Roster/Programmer and check Show CV Numbers in Tooltips. You can even change how long the tooltips are displayed for in Edit/Preferences/Display/GUI, at the foot of the box.

To change a setting, alter the number, move the relevant slider, select the value required, and then click the Write Changes on Sheet, or Write Changes on All Sheets

buttons to have DecoderPro write these changes to the locomotive. Once you've made all your changes and written them all, don't forget to save the changes in DecoderPro as well, via the Save to Roster button on the Roster Entry tab.

Next, you can try placing the loco on your layout, if you are connected to your layout's DCC system.   Click the roster entry for the loco, then click, on the Roster screen, Programming on Main, in the bottom right corner, then click Program. You can't now read any CV values, but you can change them - that's why you read them all first.   You can change them while the loco is moving and see the effect instantly.

If you lose this copy of Roundhouse, do be aware before you lose it that there is a reasonably up to date user manual available at http://jmri.org/help/en/html/apps/ DecoderPro/index.shtml. Partway down that page you'll find the section called DecoderPro User Guide.

I think that's enough DecoderPro details for now, but just let me leave you with a few tasters of what else it can do:

Depending on your system, you'll see a system menu pulldown choice appear. For Digitrax users, this allows you to program Loconet devices such as DS64s, BDL168s, and even the command station, as well as set up the Digitrax wireless system. Depending on what other systems allow a connected computer to do, you'll see some similar choices for your system if it's not a Digitrax one.

Actions/New Throttle allows you to create on-screen throttles and drive trains with them! You can select locos from the roster, or just type in the address. This is particularly useful when using a SPROG - and if you use the SPROG as a command station, is the only way to operate the trains, apart from....

Actions/Start WiThrottle Server starts the JMRIserver program component that enables Engine Driver, on an Android phone, or WiThrottle on an iPhone/iPad to connect and drive trains.

PanelPro enables you to draw onscreen layout diagrams, or mimic CTC panels, and, if you have layout block detection, see where trains are. If you have DCC operated points and signals, you can control them from that panel.   You can even write your own scripts, called Logixs, to automate the running of some or all of it.

OperationsPro will manage train makeup for you, and set up switchlists and so on. Not for the faint hearted, apparently, but I'm told that it is worth the personal investment if you get into it properly.

DispatcherPro deals with automated running.

And there is quite a lot more. Enjoy!

<div align="right">Mick</div>

Rubbish and Recycling

Recycling will be collected each club night, this includes card, plastic bottles and cans. Please leave it in the kitchen or the box/bag provided.

Quick Trees

One of the key scenic elements on my High Wycombe layout is the huge retaining wall that makes a dramatic backdrop opposite the down platform. This carries Totteridge Road which has a garden wall boundary for 4 large Victorian villas – alas only one remaining, the others having been replaced in the 60s with characterless low-rise blocks of flats.

I made the wall itself some years ago (my first venture in laser cutting), but I wasn't happy with the garden wall which I created from embossed card and Slater's flint sheet. I hadn't got the proportions right and the entrances to the lanes leading up to the houses were too wide.

Having rebuilt the wall with laser cut parts, I was happy with that aspect, but was faced with producing around 25 trees to place along this boundary wall. All the photos I have dating back to the 30s, show a dense tree line with specimen trees mingled with shrubs, bushes and saplings. Easily identifiable are two or three Scot's Pines.

Paul's excellent tree making course imparts the skills needed to make high quality individual and identifiable trees. The thought of making 25 or so seemed somewhat daunting and I looked for a quicker solution. The answer lies in Sea Moss. I had bought a box of this stuff some years ago – sold as 'Forest in a Box' – and dug it out to have a look. Sea Moss is a natural, delicate product (see photo) which comes in various shapes and sizes from short or tall, to fat or spindly. The pieces are tightly packed and need to be separated with care as the stuff is brittle. It comes pre-treated so shouldn't rot or anything like that. Small, thin leaves are best carefully removed with tweezers.

I have used two methods to produce trees and the photo shows the sequence. Spray the 'armature' with the cheapest (and stickiest) hairspray you can buy. Quite what this does to women's hair, I can't

imagine, but I doubt they would need a crash helmet for bike riding. Next sprinkle on the scatter of your choice. All mine are of the minced foam variety acquired from various manufacturers over the years – Woodlands Scenics, Greenscene, Heki and some of indeterminate origin. The model is set in early autumn, so I enlisted the help of Gill's eye in getting the colour right. We spent a few weeks in late September/early October paying attention to leaf colour – particularly on the trip to Romney. The variation is considerable, with some trees still in summer colour, some in lighter shades of green and yellow, while others show an explosion of oranges and reds. Some trees have the colour uniformly distributed throughout the foliage, but others have occasional branches that have 'turned' first.

Back to the methods. The photo on page 21 shows 2 methods. The first simply scatters the minced foam onto the armature and results in an open airy feel to the tree. The second method involves draping some Polyfibre onto the sea moss first. The fibre comes in a dense wadge and only a small piece is needed. Tear this off and then really tease it out so that it is gossamer thin. Lay this over the sea moss, apply liberal amounts of hair spray and then scatter. With both methods, I usually do 2 applications.

The photo on page 21 (clockwise from top left) shows an untreated piece of seamoss; seamoss draped with Polyfibre; Polyfibre tree with scatter; simple tree with scatter. As you can see the covered tree is much denser. This one is poorly shaped and only for demo purposes.

The other photos show the wall with the shrub/sapling line in situ. Some gaps have been covered by inserting small fragments of coated seamoss in from behind or

pushing in a scatter coated chunk of polyfibre. Some mature trees now need to be added and some further work is needed to improve the density of the tree line. Putting a green coloured card behind will help, I think. Finally, you will see some ivy trailing over some walls. This is achieved using postiche which is fine hair. Teased well out and then coated with dark green scatter, it is then tacked onto the walls with a bit of pressure sensitive glue.

Tim

Photo of one of Phil B's locos (Royal Scot No 46148, named "The Manchester regiment") after its new owner has repainted it in a later BR livery. Photo by David Clarke.

Risex 2019 Exhibition Report

Risex 2019 again produced a modest excess of c £1.5k – similar to previous years, but perhaps slightly higher. The numbers through the door this year were back up to the levels of the 2017 exhibition after the dip last year. Gary Day surveyed the attendees and highlighted the importance of distributed flyers in advertising Risex. The halls were very busy in the morning especially but held up well into the late afternoon. BBC 3CR came too – thanks to David Powell for providing the sound bites.

Those who have not yet seen it or for those who were not at the exhibition then please see the following YouTube video post by one of our visitors: https://www.youtube.com/watch?v=DiNIHz6LPJY

We had the benefit of trade magazine featured layouts Ealing Road (from Channel 5 The Great Model Railway Challenge), and the layout formerly known as Otillies. We also had Luton MRC's Central Works which generated satisfyingly loud industrial sounds. The remaining layouts were also of high standard and interest. Thanks to Ant Mead for finding them.

All traders were positive about their trade. We will need a new trader for 2020 to replace Richard Boddington Postcards, who has retired his business.

Catering was well organised and the product well up to our high standards. We will continue to rely on the offers of cakes to supplement the food offer, which is a major feature of the day. The filled roll quantities were over-generous again – perhaps the array of tempting cakes is the cause.

Thank you to all Club members, significant others and family members who provided support prior to and on the day.

I have decided that it is time to hand over Risex to another club member(s), who may face an interesting new challenge/opportunity with the proposed expansion of the Community Centre by its new management – Risborough Town Council.

Remember that the next Risex in 2020, is on the 22nd February, so put the date in your diary now.

Thanks
Adrian
Risex Exhibition Manager

RAILEX 2019 Exhibition

Just to remind you that our largest Club event Railex 2019 takes place on the 25th/26th May, at Stoke Mandeville Stadium, and you have already marked the whole weekend down on your calendar!

The weekend starts with the setting up which is from 9am on Friday up to about 9.30pm. Then at 12pm it is all hands to the pump to get the hall ready for the arrival of the vast majority of layouts and traders which will start to arrive from 3pm. This continues from 8pm on the Saturday morning up to when we open to the public at 10.00am, with tear down on Sunday finishing at about 8pm. Please make yourself available for this and the various jobs that need to be completed over the weekend, so see our Chief Steward Bob E. and sign up today!

Once again we will have the Club Display stand, show casing our layouts and our models. Tim P. is organising this, so please see him if you can support him in any way, as I am sure that he will be speaking to some of you regarding models to display and help with setting up.

Railex 2019 will have the Model Railway Journal Cameo Competition Finalists, these are the six best layouts entered in to this competition which will appear in public together for the first time. The standard of modelling is expected to be among the very best, with judging taking place on the Saturday afternoon. Plus there is the first showing of Iain Rice's Longwood Edge, add to this many other finescale layouts and the layout line up is very impressive.

See the Railex website www.railex.org.uk for more details on the layouts and traders etc.

When meeting with the layouts and traders over the weekend, please be kind and courteous to all of them, as some of them have travelled a great distance to be here, and some of the traders are taking very large stands at a great expense.

If you have not been involved before or if you have any questions about tasks, please contact the Railex Management for more details: these are, David Lane, Richard Neil and Me.

If you are going to an exhibition or know somewhere local that will take some flyers then get in contact with me by email, as we need to make sure we cover as many places as possible, to make sure that the show is successful.

ANT
Railex Management

PS: Don't forget to sort out your unwanted railway items for the Second-hand sales table, any problems see me.

Modelling Saturdays

The following dates have been booked 09.00 to 17.00

Apr 13, May 11, Jun 8

I try to arrange modelling Saturdays not to clash with other events but this is not always possible. If you are involved in or know of events that are likely to be of interest to our members then let me or Ant know so we can put them in the diary.

Paul

Test Track Nights

Here is the list of proposed test track nights. If you want to make use of the test track then you need to get it out and set it up in the Cherry Baker room. Don't wait for someone else to do it.

Apr 19, May no TT evening, Jun 21, Jul 19, Aug 23, Sept 20, Oct 25, Nov 15, Dec 13

Laser Cutting Materials

In stock we have:

0.5, 0.75, 1, 1.5 & 3.2mm white plastic (Rowmark) with some 1.5 & 3.2mm in black. Sheets are 1220 by 610mm.

Clear acrylic in 0.5 & 1mm. Sheet sizes vary but some are 1000 by 1000mm.

MDF in: 1.5, 2, 3.2, 4 & 6mm, sheet sizes are 1220 by 600mm

The max size the cutter takes is about 350 by 450mm. The larger sheets will be cut down to approx. A3 or A4 and we will calculate the prices.

Club Diary

April	1	**Start of New Membership Year - Subscriptions Due**
	4	Club Englefield Night at Coco Tamarind Indian Restaurant, Aylesbury Road, Askett (Roundabout) Princes Risborough.
	13	Modelling Day
	19	Test Track
	26	**Wheeltapper 2019** Modelling Competition, with Guest Judge and Speaker Kevin Wilson who built the layout Bucks Hill.
May	3	Trustees Meeting
	10	Resin Casting Workshop - Part 1: Mould Making
	11	Modelling Day
	17	Resin Casting Workshop - Part 2: Casting
	24	Railex Set Up
	25-26	**RAILEX 2019** Exhibition, Stoke Mandeville Stadium, Aylesbury
June	1-2	DEMU Showcase, Green Bank Leisure Centre, Swadlincote
	8	Modelling Day
	21	Test Track
July	5	Trustees Meeting
	6	Beaconsfield MRC Exhibition, The Beaconsfield School, Beaconsfield
	19	Test Track
	20	CMRA Modellers' Day, Parmiters School, Watford
August	23	Test Track
September	1	Start of R&DMRC Financial Year
	6	Trustees Meeting
	20	Test Track
	28-29	Scaleforum 2019, Stoke Mandeville Stadium, Aylesbury
October	18	**Club Photographic Competition** with Guest Judge and Speaker Geoff Plumb
	25	Test Track
November	1	Trustees Meeting
	2	Wycrail, Cressex Community School, High Wycombe
	8	**AGM** (Annual General Meeting)
	15	Test Track
	15-17	Kirkmellington at Wakefield Railway Modellers' Society, Thornes Park Athletics Stadium, Horbury Road, Wakefield

Photos from my visit to Classic Remise, which is a Classic car museum in Dusseldorf sited in a old 30-road roundhouse. Gary