Risborough and District Model Railway Club

Jan-Mar 2014 Winter

FOOTPLATE

Who's who!

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The AGM has now passed and we reviewed the last year which has been very busy. It was noted how everyone made a big contribution to the club's events, so thank you everyone, without your help we would not have a club. More importantly we have made some plans for the next year. I am planning some workshops for scenic work which will tie in with landscaping Okehampton. We will also look at DCC sound and using Decoder Pro with Mick and another suggestion is resin casting. What skills would you like to learn? Let us know.

The big decision of the night was to purchase a laser cutter. This can be used to produce a wide range of models for Aylesbury, Okehampton and our own projects. David Lane is planning a CAD workshop to teach members how to produce the artwork for printing. James will install the printer at his home as it requires extraction and water cooling so cannot easily be used at the club. We will obtain a small stock of materials to go with the cutter. We will also be replacing the cordless vacuum cleaner that failed and have now purchased a

cordless Dremel minidrill.

You have the same committee as before (see left), so I guess you are all happy with what we are doing. The Pendennis Trophy was won by Jon Hill (below left) for several reasons but basically for being good at making tea and bringing some very nice biscuits;-). Woodwork skills and the possession of a van may also have been mentioned.

I would also like to remind members that the **Okehampton Wagon Project** is still running. Anyone who would like to have a go at making a 7mm open wagon can have a kit and all the help they need to complete it. I have had 1 person take up the offer since the AGM so how about you new members, we give you a kit and help you build it. Seems a good deal to me.

We have started clearing unneeded items from the clubroom, the books have gone to Chinnor Railway and the spare baseboards and transformers have found a new home.

Risex will soon be here so make sure the date is in your diary (see page 23 for

Front cover: Chiltern Railways study, London Marylebone by John Casson.

all club events). There will be plenty to do for everyone so please let Adrian know if you can help. Wheeltapper will be in March, we will send round the rules and categories nearer the time. Do read them as they can change a little each year and make sure you enter, you never know what the judge will like!

On pages 7 & 8, you will see my attempts at painting 7mm cattle for Okehampton. I still have quite a lot of miscellaneous animals left (including, chickens, dogs, pigs, sheep, etc.) from the set if anyone would like to try out their painting skills.

Paul

Building Baseboards

When some space came available in the house to build a diesel depot layout, a decision had to be made, whether to make baseboards myself, or buy them. The decision was to buy them, simply because I haven't got

room to cut the wood and assemble them at home. I thought about looking at Brilliant Baseboards, but wasn't sure if they still traded.

So last year at the Risex exhibition, I saw and picked up a leaflet advertising Elite baseboards. So I looked on their web site and liked what I saw:

http://www.elitebaseboards.net/

There is a ten minute video to show you. So I measured up and chose the size of boards that I needed (900mm long so that 3 baseboards filled the space available) and had them delivered.

They came flat packed and after reading the instructions they were easy to put together with the supplied fixings. Legs are also available which are again made from ply. Alignment dowels and connectors must be purchased separately but the holes for the alignment dowels are pre drilled along with plenty of holes for cables. I am very pleased with the boards and would recommend them, and I will be buying from them again.

Steve

It is Exciting Work

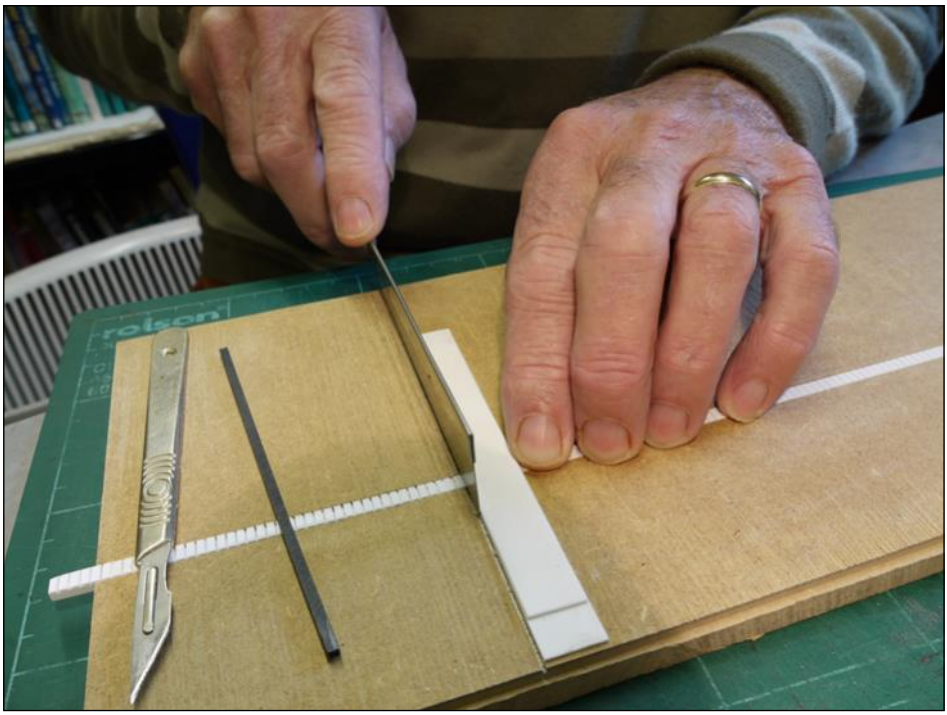
Lo, and it came to pass, whilst about my lawful occasions in the Vale of the Hampton of Oke, a carpenter bearing little hair came unto me saying, “Prithee, good fellow, art thou skilled in the art of fashioning plastic?”

“My Lord,” sayeth I unto the carpenter, “Verily my talents were acquired in the service of the great Slater, and knoweth no bounds.”

“Thus it is, then, my son, that thou shalt travail for me in the in the building of the great Temple of the Aitken of Oke at Hampton, which is in sore need of clay bricks for the glorification of the dais or raised platform upon which the people of the land shall bend the knee to a seated position whilst awaiting the will of the Great Controller of All Movements.”

Yea, blessed am I that serve the carpenter bearing little hair in the name of Him that goes short in stature and tall in wondrous works.

And thus it was that I took up the razor saw and scalpel that were most wondrously crafted by the skillful smiths of the Orient, and applied these to fashion each and every brick, in accordance with the measuring aid devised and fashioned from wood of the BandQ tree by the magnificent carpenter bearing little hair.



Yea, for truth must be told, each unit of plastic measures one half of a cubit in length and provides sufficient length thereto for an hundred and forty and seven bricks. The plans and deliberations of the Architect of Oke demand a countless multitude of bricks, sufficient unto the working of eighteen cubits of plastic. And thus, at the time of the passing of this day, some eight cubits of plastic have been fashioned into bricks with neither artisan nor even apprentice to aid my labours.

John

Cattle progress

The 6 Devon Red cattle have now been painted. The real animals seem to have a range of shades from a sandy brown through to dark red brown and I have tried to reflect this variation in the models. The base colours I used were: horse tone - chestnut, brick red and Horse tone - Dun. Other colours used were black, white, grey, linen, flesh?. On top of these were colour washes from Games Workshop: mud and black and from Coat d'Arms: light and dark brown. The GW washes are very thin and more ink like than the Cd'A washes which are more like paint. These are designed to be brushed on and then wiped off. Horns are painted white with a touch of black.

The cocktail sticks used to hold the cattle during all the painting were removed and short lengths of 0.5mm brass wire inserted into the hooves for fixing. You only need one or at most two fixing wires.

The pupils of the eyes are painted with the end of a cocktail stick, just a quick poke in the eye!

Back and Forth with my Raspberry Pi

I've recently been playing with the Raspberry Pi with the aim of automating operation of a shuttle service – you see these a lot on layouts which are designed for display (rather than play). At the heart of the system is a Raspberry Pi computer – a credit-card sized naked main computer board with a camera style SD card for a storage device, costing around £30.

There were a number of components that I had to integrate into the system that is now beginning to emerge. A 'Sprog' unit is used to pass DCC commands into the track system, and to drive the loco or train unit according to the command. It also supplies the power.

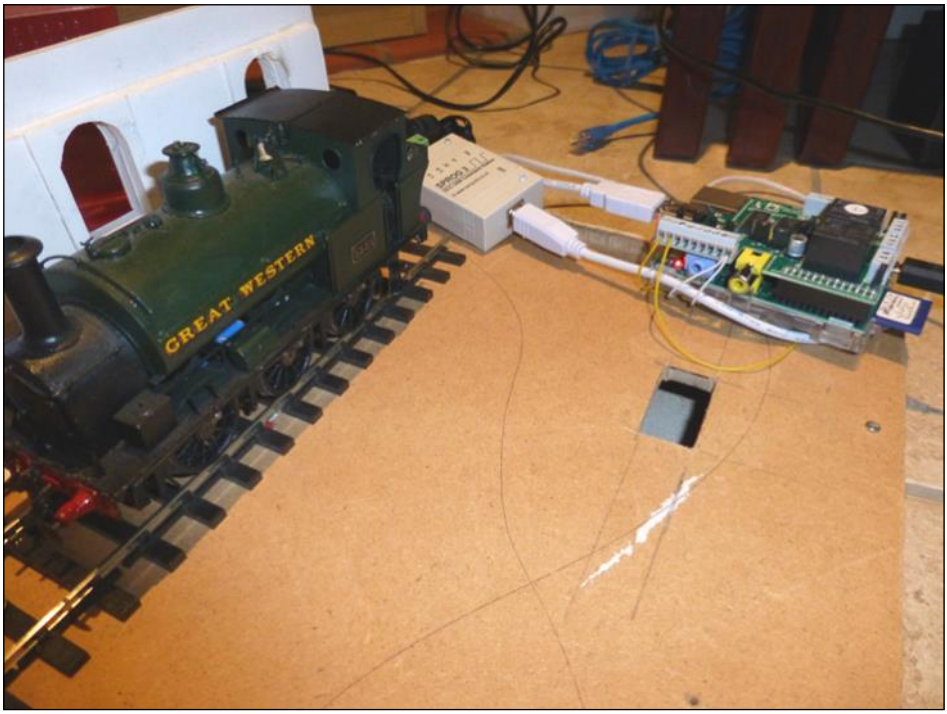
The Sprog gets commands from a script which runs in the JMRI host program on the Raspberry Pi computer (JMRI – Java Model Railroad Interface). The travel extent of the shuttle service is controlled by track occupancy detectors – these work by detecting the current drawn from the DCC power source when a loco enters the isolated section to which the detector is attached. I've used ones which I constructed from simple Pocket Money project kits designed and sold by MERG.

When the loco enters the isolated section an output circuit of the track detector behaves like a switch being pressed, and this circuit is wired into an accessory of the Raspberry Pi called a PiFace. This is a little gadget that fits on top of the Pi and is intended to simplify the connection to, and the use of, a set of 'pins' which project from the Pi itself.

A 'Python' program in the Pi scans the switches looking for a circuit to activate, and sets a flag for the shuttle script when this happens. A 'BackandForth' script is part of the example scripts provided by the JMRI suite, and I modified this to detect the flags, and to proceed to the next action. This is to stop the current loco movement, sound some whistles, reverse the loco direction of travel, hang around a bit, and then set the loco moving.

While all of this has some potential use, the prime motivation for me was to have a project on which I could get my hands dirty and learn something concrete to boot.

In the picture, the Pi is on the right, with the PiFace board on top. The thin yellow wires are from the track occupancy detectors, with thin white wires are connected to a common ground for the two circuits. The thicker white cable is a USB connection from the Pi to the Sprog. On the right of the Pi you can see the SD card (8 Gbytes) and the black cable of the mini USB power source (5V). The silver unit at the top left of the Pi is the Ethernet socket (blue cable



disconnected in background) which enables me to drive the Pi from my desktop (so-called headless mode) instead of connecting a screen, keyboard and mouse.

The loco (1331) is the one being driven in the JMRI script, which controls the 'Throttle' for this specific loco, in a manner similar to the way the DCC handset would be used.

This is the link to the Raspberry Pi quick start guide:

http://www.raspberrypi.org/wp-content/uploads/2012/04/quick-start-guide-v2_1.pdf

Adrian

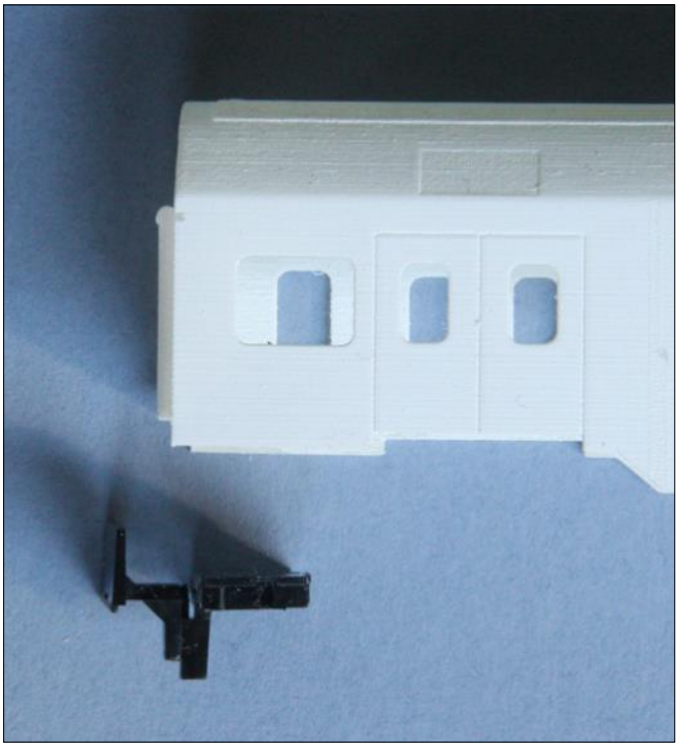
Note: Python is a programming language.

The Raspberry Pi Foundation is a UK registered charity (Registration Number 1129409)

Dutch Double Deck stock - part 3
Fitting the close couplings.

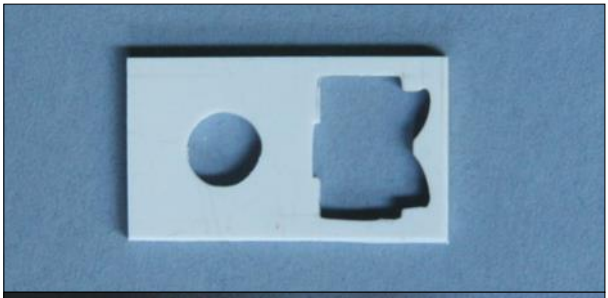
I am slowly making progress on my Dutch coaches. Having bought the bodies and interior/chassis units from Shapeways and the bogies & wheel sets from the Minitrix spares dept, I then waited patiently for the close coupling units on eBay. These units are €12 a pair in the European discount shops, more in the UK, but a bit of waiting provided the required number of units for half that price. A visit to the Eurospoor exhibition in October then provided me with the decals and correct shade of yellow paint from KleinSpoor. I now have everything I need, just add modelling time and work out how I will make the windows which are not flat on the top deck.

The interior/chassis were given a good clean in an ultrasonic bath. This took some time as there was still powder left under the seats. The bogie mounts were cast in polyurethane from a master I made from polystyrene strip and rod, (see Apr-Jun issue) and added to the chassis, fixing in place with superglue and then drilling out a hole for the bogie fixing screw. Bogies and wheels were added and fixed in place on these mounts with 6 x 2mm servo screws (eBay again, 50 screws for about £2). These screws are self tapping and have a large head looking like a normal screw with a washer. The chassis were designed for a Tomix bogie which would have been quite wrong. A Fleischmann chassis could be used but again wrong bogies.

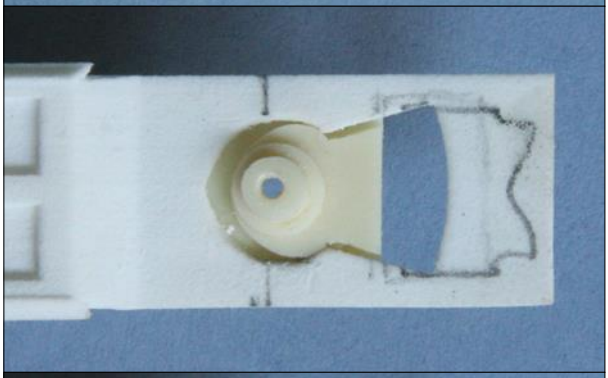


The close coupling units now needed to be added to the chassis. My first thought was to simple mount them under the body, but in this position they hit the bogie and the coupling head would be too low. They have to be set into the chassis flush with the underside.

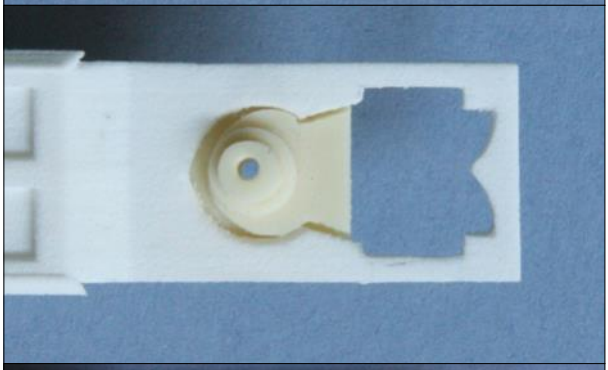
Left: the coupling unit with the alignment plate attached. This allows you to position the unit the correct distance from the end of the coach. This was used to make a marking jig to make making all the coaches easier.



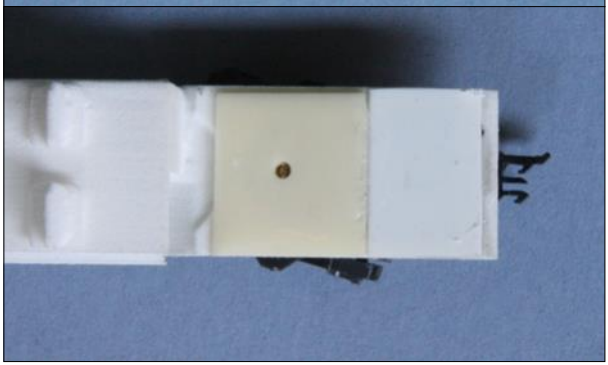
The marking jig, made from a strip of polystyrene. The hole allows positioning over the bogie mount. The odd shape is to allow the coupling head to move outwards as it swings across.



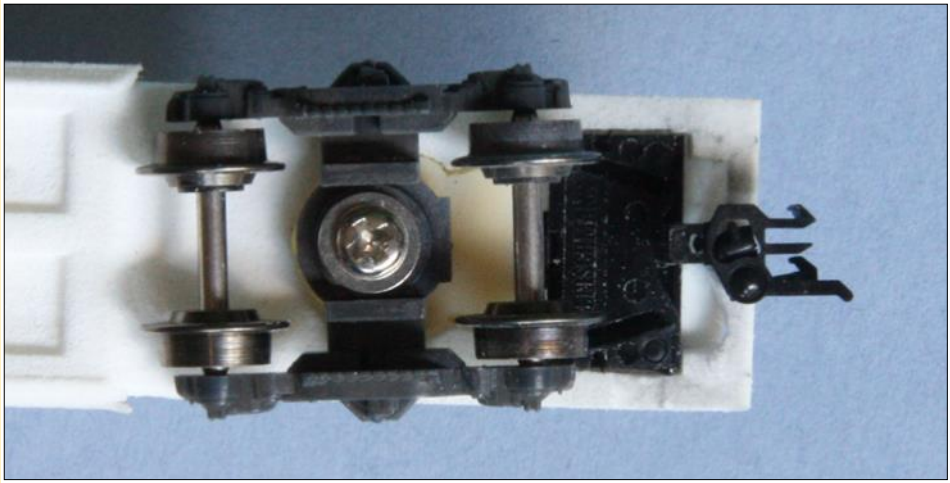
The area to be cut is marked in pencil. You can also just see 2 recesses on the underside of the chassis which will be used to add metal strips for weight.



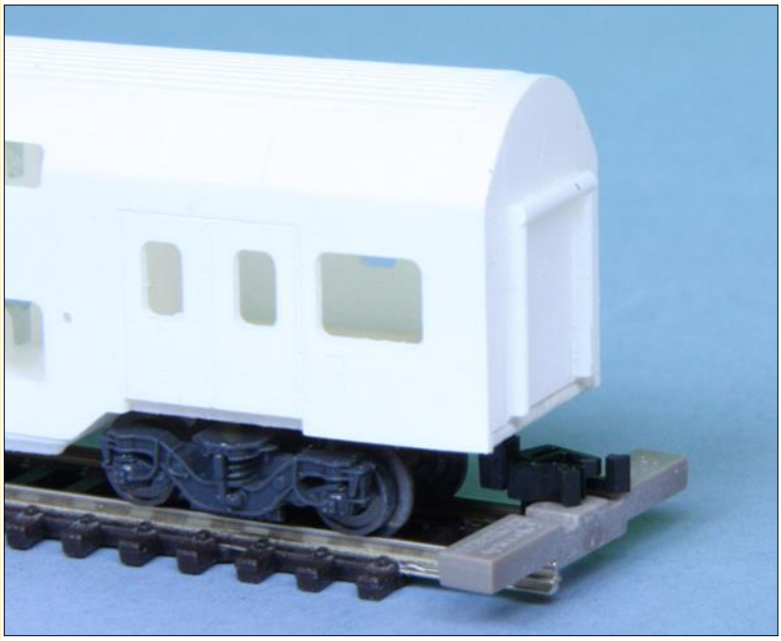
The chassis is cut away using a burr in a minidrill and then shaped with a scalpel. The "strong, white & flexible" material used for the 3D printing of the chassis is very easy to cut but does not file so easily.



Turn over the chassis and add a strip of polystyrene to complete the socket. Interior detail will be added here, there should be some stairs and seats at both ends of the coach and the toilet at one end only. The coupling head is the Fleischmann Profi coupling and is height adjustable.



Above: The completed unit with bogie, wheels and coupling head in place. The close coupling unit is held in place with a very small amount of UHU. Superglue was not used in case it got into the mechanism.

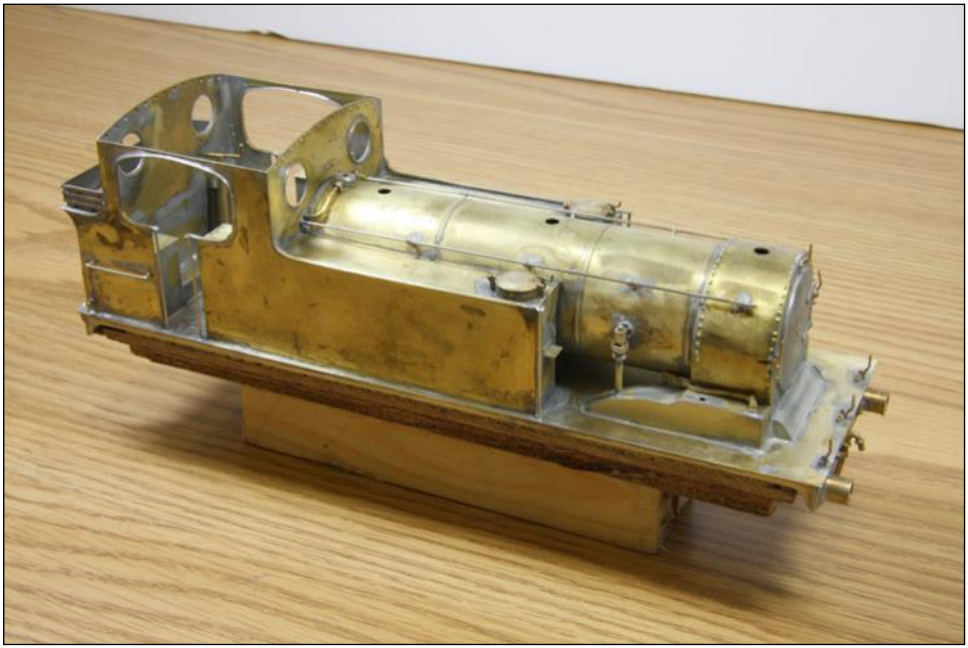


Finally, another jig is used to set the height of the coupling unit. Now I have a 4 coach train that can be tested on the layout around the tightest curves and through the complex pointwork. Adjustments can then be made as the UHU will allow the units to be removed and repositioned.

These close coupling units can be used on a wide variety of N gauge stock, European, British or American. The most recent UK models already have close coupling units fitted and Continental model have had them for quite some time.

Paul

Work in Progress



Above: A Connoisseur Models G6, my first steam loco build, scratch built cab interior with lots of extra fittings from Laurie Griffin, to be the Meldon Quarries Shunter DS 3152 which will make occasional trips to Okehampton shed

Ian G.

A man's shed is his castle

I've been talking a lot about the "shed" I'm building so here are some pictures and a progress report. Work started in Michael's conservatory last year when he and I were working out how big it was going to be, how to build it, what sections we needed, etc. Then in May we started digging the ground. My garden slopes so we had to dig over a foot deep on one side and only 6 inches the other to level the plot. But the ground was littered with roots, connected to a cherry tree and two apple trees near the shed location, so it was hard work. "Like digging concrete" as Michael pointed out one day.

Once the surface was dug out, the foundation strips were then dug and concrete laid. I bought a mixer a while back as I knew I'd need a lot of concrete one day. A row of blocks sits atop the right concrete strip to bring the top to the right level.

Next a floor which is 6" by 2" (150mm by 47mm) treated joists laid on damp proof plastic.

While we were doing the foundations we had also been making parts for the shed, especially when the weather was not suitable for work on the ground. Oddly for British summers, it was often far too hot to work outside on heavy work, and easier to work on woodwork. 15 roof trusses were prepared, as well as doors and shed ends. All the timbers were cut to size for the "erection party" we had one weekend. Because Friday turned out nice, Michael, Pete and I managed to erect the frame on our own. Many thanks to Roy, Ian, Andrew David, Pete and Michael along with local friends and one of my sons as we were able to get a long way erecting the main structure and roof.

The frame was the result of a Friday before the erection weekend with just three of us. At the end of Saturday we had this:

I wanted to get the roof on in one go. 16 sheets of 8 by 4 ply and 5 rolls of felt later and there we were. Sunday and we had some windows in and shiplap on.

Since then steady progress has been made and now it is like this:

We can now concentrate on the inside, and to that end, I have been wiring the lights with Pete's help, and just today with Tim we were able to get the first part of the inside done. It's a fabulous space for the railway, and the cost? A 31 foot long, 10 feet wide shed, fully insulated with 7 double glazed UPC windows, 3 doors, lined with plasterboard, fitted with ten double power sockets, 5 strip lights - I'm still under my budget of £5000 but I suspect I will be a little over once it's finished as I still have some more stuff to buy.

James

Articles for publication in Footplate

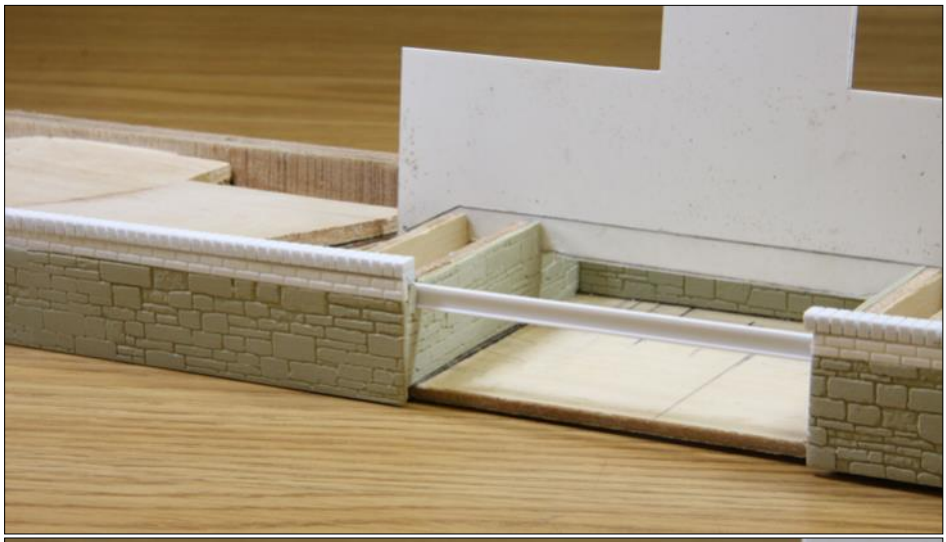
Articles can be on paper or in electronic form (preferred) with minimal formatting, preferably doc, txt or rtf. Digital photos should be at as high a resolution as possible to allow editing and good print quality.

We would like to hear about your railway and modelling interests, places you have visited or models you have bought or made. Reviews of models, gadgets, books etc. are particularly welcome.

Articles should be sent at least 1 month before publication dates, i.e. beginning of March, June, September and December for publication in January, April, July and October.

Okehampton Update:

A couple of photos showing the platform and wall construction. The stonework is a Wills plastic stone sheet that has been smoothed which changes the effect to make it much closer to the real platform edges, while the brick edging is made from Evergreen plastic strip, see page 6. The main structure is constructed from ply.



Above: the first sections of carved clay “stonework” are fitted to the bridge. A little filling is required between the sections. Then a little further curving to finish it off.

Upper Right: A busy Saturday working on the hills at the back of the layout as well as adding bracing to make sure the boards stay square. Having completed the station yard and road area, the shape of the hills can now be adjusted. The brown area is made from chicken wire and covered with brown paper and wallpaper paste. This will be built up until it is sufficiently stiff. This method construction allows the complex shape of this part of the hill to be formed and allows more space underneath for the hidden sidings. It is also light weight which is a very important consideration for an exhibition layout. There will be a hay store on this section of the layout, located close to where the tub of filler is.

Above: a view taken from the London Eye looking down on Charing Cross station and Hungerford Bridge on the 17th August by Ant . On the electronic version of Footplate you can zoom in to see all the detail. In particular see the size of trees and buildings compared to the rolling stock.

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. Don't wait for someone else to do it. We will also have the small meeting room booked to provide more space.

Jan 24, Feb 14, Mar 28, Apr 25, June 6, June 27

Modelling Saturdays

The following dates have been booked 09.00 to 17.00

Jan 18, Feb 8, Mar 8, Apr 12, May 10, Jun 14

From the Internet

British Rail: The Nation's Railway by Tanya Jackson

Hardback ISBN: 9780752492674, £18.99
Published by The History Press
http://www.thehistorypress.co.uk/index.php/british-rail-the-nations-railway.html

Video of 45699 Galatea on railtour over Shap & Settle and Carlisle
http://steamingaroundyorkshire.co.uk/Pages/2013/November/9th.htm

K&WVR on 10th November
http://steamingaroundyorkshire.co.uk/Pages/2013/November/10th.htm

RhatischeBahn web site and anniversary links
http://www.rhb.ch/RhB-125-Jahre-faszinierend-un.2542.0.html

Raspberry Pi:
http://www.raspberrypi.org/
http://en.wikipedia.org/wiki/Raspberry_Pi

This is what happens when two trains meet on the Bamboo Railway
http://www.youtube.com/watch?v=ilJAczgfmHk

Train ploughing through deep snow, Arthurs Pass
http://www.youtube.com/watch?v=6acPX_00M9Q

Club Diary

January	4	Marlow, Maidenhead and District MRC Exhibition, Cox Green Community Centre
	11-12	St Albans Exhibition, The Alban Arena, Civic Centre, St Albans
	18	Modelling Saturday
	24	Test Track
February	8	Modelling Saturday
	14	Test Track
	21	**Risex Setup**
	22	**RISEX 2014 Exhibition, Community Centre, Princes Risborough**
March	7	Wheeltapper 2014 Modelling Competition, with guest judge and speaker Tim Watson from The Model Railway Club's Copenhagen Fields layout.
	8	Modelling Saturday
	28	Test Track
April	12	Modelling Saturday
	25	Test Track
May	10	Modelling Saturday
	23	**Railex Set Up**
	24 - 25	**RAILEX 2014 Exhibition, Stoke Mandeville Stadium, Aylesbury**
	31-1 June	DEMU Showcase, Town Hall, Burton-on-Trent
June	6	New Members Welcome Day (Friday Evening)
	14	Modelling Saturday
	27	Test Track

Back page upper: Arriva Trains Wales at Crewe for Llandudno.
Lower: Northern Rail class 323 at Crewe.

Photos by John Casson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Crewe
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