

The Whistleblower

April 2013

CIPPYING AWAY

I know we all joined the railway club to play trains but there has been an awful lot of carpentry going on over the last month. The N gauge have been busy "digging" hole for roadways and rivers, new wider baseboards are being fitted to Greenfield Sidings and the O gauge have finally started building baseboards for the new layout. Rumours abound as to who is going to get trains running first - competition, is it a good thing? The really good news is that many of the newer members are getting involved - excellent news.

COMMITTEE FEEDBACK

- A committee meeting was held on 13th March. Noel Leaver was unable to attend.
- The Treasurer reported that we have 46 full members, 5 associate members and 1 junior at present whose subscriptions just cover the rent and insurance for this financial year. Membership is slightly down on last year.
- Additional fund raising is going well with over 50% of the target raised to date. Please keep up the good work as this all contributes to the cost of building and maintaining layouts.
- With Greg Coady moving to Kent, Richard Harris will be taking over as Committee Rep for the P4 Group from the next meeting.
- Take up of the club dinner was lower than previous years with 18 club members and partners attending. The food was excellent and the company good. Very little railway talk was the order of the day.

PROGRAMME FOR 2Q13

Date	Group Rota	Event	Subject
April			
Wed 3	OO	0 gauge running night	Weydon Rd
Wed 10	P4	N gauge running night	
Wed 17	O	Presentation	Club mini lathe use - Robin Baker and Greg Coady
Wed 24	N	00 gauge running night	
May			
Wed 1	OO	0 gauge running night	Preparation for Open Day
Monday 6		O Gauge open day	0 gauge group event – entry £1
Wed 8	P4	N gauge running night	
Wed 15	O	Presentation	
Wed 22	N	00 gauge running night	
Wed 29	OO		
June			
Wed 5	P4	0 gauge running night	Running track
Wed 12	O	N gauge running night	
Wed 19	N	Free evening	
Wed 26	OO	00 gauge running night	

TRIP TO THE NRM - JULY 11TH

So far there has been 11 people who have expressed an interest in going to the NRM in July to see the six preserved A4 locos together in one location. The closing date to let me know is this Wednesday 17th April. I will then reserve the rail tickets from Kings Cross and let you know the cost - once this is done I need payment immediately to confirm your place (no payment, no ticket I am afraid).

I will advise the train times and more details by the end of April.

Gauge O Open Day - Bank Holiday Monday 6th May 2013

The annual O Gauge Open Day will be held in 3 weeks. The arrangements are as follows:

- Weydon Rd, the running track, Brookford (Paul Lindsay-Scott) and Aldermouth (Jim Edwards) will be exhibited.
- Opening times are 10.00 am to 4.00 pm
- Entry fee is £1 (to cover the hall rent)
- Bacon rolls, cakes and tea & coffee will be on sale
- If non O gauge members want to help, please see Eddie Jackman (everyone else has to pay)

If you want to see lots of superb O Gauge rolling stock then this is a must for you.

Presentation on Wednesday 17th April.

Robin Baker and Greg Coady have kindly agreed to make a presentation on using the club mini lathes. You may be aware that we have 2 lathes for club members to use as required.

Most members do not know how to use lathes so this will be a very useful session instructing us in the basics of turning metal. If you want to have a trial run under Robin/Greg guidance then I recommend you bring along your own safety goggles.

EXHIBITON DIARY

Club layouts

- 27/28th Apr - Brixcombe @ Epsom & Ewell
- 6th May - O Gauge Open day
- 11th May - Brixcombe @ Watford

Exhibitions of interest

- 20 April - East Surrey N gauge, Redhill
- 27/28 April - Epsom & Ewell MRC
- 11 May - Loddon Vale MRC, Arborfield
- 11 May - ALSRM show, Reading
- 18/19 May - Expo EM, Bracknell
- 19 May - Warley open day

ANNUAL EVENTS IN 2013

Diary dates for members, here are the club events to be held throughout the year.

- The O Gauge open day. To be held on Bank Holiday Monday 6th May. Weydon Rd, Round the Bend, Aldermouth and Brookford attending + Gauge O Guild stand.
- Summer club outing. We planning to visit the NRM, York on Thursday 11th July to see the 6 A4 locos together. Please see page 1 for details.
- American Night. Following the success last year we will hold this again on Wednesday 3rd July. We will invite other local clubs to this.
- The modelling competition. Planned for the evening of Wednesday 18th Sept.
- The Club Exhibition. To be held on the weekend of 12th/13th October at The Connaught Centre, Aldershot. Greenfield Sidings will be attending.
- The Club Open Day. To be held on Sunday 27th October. The club layouts being erected are still to be determined - please let me have your inputs now!
- The photographic competition. This will be organised by F&DMRC and held in our club rooms on Wednesday 13th November.

LAYOUT REPORTS

N gauge group: Applicable to any scale, David Harrington has carried out successful trial of a 'Frog Juicer' - a device to automatically change the polarity of track in DCC systems when electrofrogs or reversing loops are used and for N gauge interest several items of newly released stock have been admired, run in, and where relevant fitted with DCC chips.

However, Wickwar development has dominated. **Scenically** Board 3 has been concentrated on and the base for the river is now fitted and we think at the right level and the road base is ready to be fitted when the contour profiling is at a suitable stage (currently being marked out). **Track laying** has been an instructive process - we have concentrated on Board 4 using in the Fiddle yard Setrack Radius 3 and 4 curves, 2 pairs of double curved points and Code 80 Flexitrack between them. After much discussion it was decided to use double sided tape to secure the track to the board - this was quickly changed once we started laying - some subtle changes of curve in the Flexitrack are required to match the Setrack and point curves - little if any adjustment is possible working on a bed of double sided tape! The problem then arose that standard track pins will not hold in 3mm Ply so David H sought advice and secured some N gauge Setrack pins which are shorter and fatter with broader heads than the usual variety - these appear to work well but I suspect we should supplement them with some form of liquid glue once the track layout is proved. The approach to the FY transition from Board 4 to 3 is quite complex and taught me an interesting lesson - a slight variation in length of the flexitrack used between fixed curves can make a considerable difference to the transition from one to the other - cutting the length 8mm longer than the maximum I thought I needed usually resulted in me trimming no more than 3mm to get the best transition - this results in a barely discernible S shape to the Flexitrack which needs careful pinning to retain the smooth transitions. **Electrics** - I am in the process of filling over 60 printed circuit boards - fortunately there are only 8 types and the majority are sparsely populated. I expect the layout to be fully operational electrically some time in June and expect to give a guided tour of Wickwar operation to the club as a presentation evening in the early Autumn.

Wickwar has now received its **first official invitation** to a show - Yate (2014) near Wickwar - as a work in progress. We now have to decide whether to exhibit as a conventional layout or to make a feature (for this show) of the fiddle yard shuffle and its electronics (I prefer the latter) as this will influence where they place us in the hall.

OO gauge group: It was decided that the space in the centre of the layout is inadequate for comfortable operation at exhibitions. Therefore, additional boards were constructed to give 2 feet extra depth front to back. These boards have been constructed and put in place to establish the amended FAST track alignment available. As the three-way points are not robust and have given frequent problems, an alternative is proposed in the point configuration. Scrap the three-way points on Boards 2 & 4 and replace with large radius and curved points on Boards 1&12A/5&5A. This means that we can still use Peco points and switches to operate solenoids and indicators. The big benefit in moving the points is to extend the length of Fiddle Yard Sections by approximately 2ft6ins each end. The diode matrix point selectors only require minor adjustment. The track feeds will only need to be redirected to the adjacent board and the point activation split between two boards at each end. We have enough slots for the additional sockets on the panel and boards. As Greenfield is due at this year's exhibition we can do the realignment of each end as a separate module, but would prefer to complete the job to benefit from longer train sizes or more trains per track. It is not anticipated that any work will be done to the SLOW Tracks during this modification.

P4 gauge group: The emphasis over the past few weeks has been very much on preparation for the Epsom & Ewell and Watford shows, which come at the end of April and then early May. At the E & E show Brixcombe will be one of four P4 layouts so we have been working hard to sort out any minor niggles which could disrupt the running. On Wednesday 10th we had a final test on the full layout and were able to satisfy ourselves that all the work to standardise the Spratt & Winkle couplings on the goods stock has been time well spent. Over the next fortnight we must complete the line of telegraph poles, to ensure the signal box can communicate with his colleague in the next box up the line and we must trace and eliminate an electrical fault which causes random movements of the wrong loco under certain section configurations. By the way, if anyone finds a GWR square signal post finial or a couple of fire buckets, Vic would be glad to hear from you!

O gauge group: Unable to transcribe report.

GUILDFORD MODEL ENGINEERING SOCIETY (GMES) - NEW SEASON

Paul Kirkup

The new season for the GMES at Stoke Park started this month with the first open day on Sunday 17 March. Over the winter months extensive track repairs and some modifications have been made to the 30 year old indoor model tramway. This was to rectify persistent derailing and grounding problems, sticking points and power cut-outs. These nearly always occurred at the point furthest away from the control panel. Despite its age the layout is still in good condition

The oval-shaped tramway runs along the inner edge of the 00 gauge model railway layout (based on Cheltenham Station on the mid 1930s, up one incline, round the back of two large scenic boards and down another incline. During open day operation some trams had frequently jumped a set of points on the left-hand-side behind a scenic board and again on a passing loop on the right-hand side. Trying to re-rail the tram meant lowering one scenic board in full view of the public. To get to the other meant bumping past other operators and did not look good.

Part of the left side incline track had a kink in the track bed. When the track was removed a large piece of supporting wood was found to have pushed through the surface. This has been smoothed out and the track re-laid. Further up the track, near a passing loop just behind a scenic board, part of the road surface was found to be fouling the track and a point blade had become detached.

The kinked track bed and passing loop were both removed, the road surface taken out and the track bed smoothed down. New road, track and a passing loop have been installed further back from the scenic board. Trams made a test run and everything worked perfectly. The track and points on a passing loop on the right hand side have also been replaced and new point motors installed. The points are worked manually at present by the trams pushing through a spring-loaded mechanism.

All this work has improved the running of the trams and reduced the risk of derailments. Further work on a single switch Gauge master control panel is needed to incorporate several point and isolation section switches. This will be done after new season finishes.

Other open days will take place on Sundays 21st April, 19th May, 16th June, 20th and 21st July (Steam gala weekend), 28 July, 18 Aug, 22 Sept and 20th Oct. All open days take place from 2 – 5pm except the steam gala which is from 11am- 5pm. Come along and enjoy see the model railway and trams running together.

ETCHED BRASS SOLDERING FOR BEGINNERS

Reprint of Paul Martin (not our ex-member) article

A Member of a Yahoo internet forum recently stuck his head above the parapet and asked whether he should solder or glue some etched brass kits that he had. He was resoundingly advised to solder and was given much advice, some contradictory and downright strange including the use of Coca Cola as a soldering flux. This all came to an abrupt conclusion when Paul Martin, an experienced modeller, posted a definitive list of requirements and methods. I found myself muttering 'I do this, and that, oh, but not that ' and decided that this straight forward approach was well worth a wider audience. After checking with a few Club members it seemed worthy of a wider audience and Paul has kindly agreed to his advice being repeated.

HOW IT'S DONE

Clean both bits of metal that are to be joined with your fibreglass brush. Make the metal shiny, do it just before soldering. Coat the surfaces with the flux. Use a cocktail stick to spread it thinly. You need less than you think. Tin the end of the iron. That is to say, clean it on a wet sponge, touch it in the flux, touch it on the solder, it should pick some solder up on the tip. If it doesn't repeat the cleaning and fluxing and if the tip is really dirty, abrade it with the fibreglass brush and then clean it, flux it and tin it. Now put your two bits of flux coated etch together, aligned how you want them and then touch the edge with the iron to transfer heat. The flux will fizz and as the etch comes up to the right temperature the solder on the tip will flow into the joint. Remove the iron and let the work cool down. You will see the surface of the solder change as it solidifies. You can let go once that happens. Clean the flux off, clean surplus solder off.

Practice with bits that are flat to flat, edge to flat and edge to edge. Make yourself a right angle corner out of two pieces of scrap and watch the solder flow up the joint by capillary action. Soldering with this set up is almost like painting. You can just wipe the solder on with the tip of the iron. This will work for simple kits and about 95% of much more complex ones and if you follow these guidelines you'll have learnt that additional five percent by the time you are ready for the complex kit.

VARIATIONS & SUGGESTIONS.

With some parts it's easier to tin both parts to coat them with solder before joining them. Do just as you did above but without the parts being together to get solder to flow on to each surface. Then put the two parts together and just apply heat so the solder on both parts melts fuses together. Remove the heat and wait for it to cool. Clean surplus solder out of joints with a selection of file, scrapers (mini-screwdrivers sharpened to a blade) or gravers (bits of tool steel sharpened). Do it after each joint - *Don't convince yourself you'll go back and do it later, you won't.* Clean the flux off regularly and at the end of every work session. Removed when fresh it runs like butter off a hot knife when put under the hot tap. If you leave it overnight it converts itself into an inert, but very hard and very stuck, solid that needs a lot of effort and bad language to shift it! Powerflow is an aggressive plumbing flux which if left for a long period would eat your central heating system. Finally, clean it with a bit of home chemistry; The flux is basically an acid and CIF cream cleaner is alkali, so give it a final scrub with CIF and a toothbrush (no, not the one from the bathroom) in hot water to neutralise and clean your newly created model.

SOME DON'TS

Don't use cored electrical solder. The clue is in its name as to why not. It is designed to have good electrical characteristics more than it is designed to be a free flowing easy to use kit building solder. As well as the flux in the cores not being aggressive enough, it works at too high a temperature (risk of heat damage / buckling of the parts), doesn't flow freely into the joint and leaves a hard to clean residue. Don't use Coca Cola. It may be high in phosphoric acid, which is a basic flux, but it's also full of sticky sugar or sugar substitutes, flavouring and other crap.

SOME DO'S

Practice, practice and then practice a bit more.

Like most things soldering is a learned skill and practice on some bits of scrap etch will help you get the hang of it and help you understand what is going to happen when you do a joint on your model for real. You will also learn to be quick with the iron and judge how quickly you can get heat into an area, make a joint and get out again before the next joint along comes undone

Practice, Practice and then practice a bit more.

FOR LATER

Once you have got the hang of it with this one simple set up you can start to learn additional tricks - like using different temperature solders to stick the bulk of the body together with higher temp solder, add the details with the lower temp solder and then add whitemetal details with low melt solder. You can learn new methods of heating and making joints but you have to do the basics before you can do the clever stuff.

REMEMBER THIS:

THE OLD WIVES RECOMMENDING ARCANE PRACTICES WERE AROUND WHEN SOLDER WAS INVENTED AND IRONS WERE HEATED BY STICKING THEM IN THE FIRE. THEY WILL ALL HAVE DRAWERS OR BOXES OF KITS WHICH THEY COCKED UP WHILST THEY LEARNT HOW TO DO IT [THEY HAVE, I PROMISE YOU, EVEN IF THEY TRY TO DENY IT] AND THEY HAVE ONE THING THAT CANNOT BE TAUGHT - EXPERIENCE. THEY GOT THEIRS THE SAME WAY YOU HAVE TO - PRACTICE, PRACTICE, PRACTICE

This is what I teach when I do demo's at shows and it works. Mr "I can't solder for toffee" gets the iron stuck in his hand and is given a go following the above procedure and always goes away having made a successful joint proclaiming "that was easier than I thought"

A few suggestions for learning to solder brass kits as a beginner:

- Get 145 degree solder. Many model shops sell it, EDM Models have it in stock!
- Get Powerflow plumbers flux from B&Q (other large sheds of DIY stuff are available) or from a proper plumbers merchant. It comes in yellow pots. Eileen's, Squires and the like sell it, but at a hobby store premium.
- Get yourself a fibreglass burnishing brush. Be very, very careful of the fine fibreglass splinters given off from these. A brass wire brush also works
- For many of the simpler kits any iron will do, but buying a decent 25W or larger iron is worthwhile. If you are determined to make a go of soldering then a temperature controlled iron is a sound investment.
- Practice on the scrap frets in the kits. Don't make your first joint '*..delicate bit 'A' to fragile part 'B'...*'

Paul Martin

Paul Martin - EDM MODELS

Before getting his real job, owning and running EDM Models in York under the 'NGtrains' banner and driving / repairing Festiniog steam engines, Paul Martin had trained and worked as a senior power and controls engineer in the railway industry.

EDM Models offer a wide range of predominately narrow gauge products, both of EDM's own production and from other small-scale manufacturers. Apart from locomotives, rolling stock and structure kits, they also carry a range of hard to get materials. Notable are a great home-brewed wood stain, Testor's 'Dullcote' and Dr. Mikes cyanoacrylate glue, a very special one that bonds most things including 'awkward' plastics like Delrin and, oh, they also stock 145 degree solder. Give the website a try: www.ngtrains.com

ARTICLES FOR THE NEWSLETTER

As you can see, I have received 2 articles since my last appeal. Keep them coming - why not write something for the Newsletter yourself. It can be about anything around railways and if you have pictures as well then that's fantastic. Any electronic delivery method is acceptable.

Thanks
The Editor