

# The Whistleblower

February 2012

## ONWARDS & UPWARDS

2012 has got off to a good start. Greenfields Sidings have exhibited at Egham and Basingstoke has been to Stafford this weekend. We have had a new member join the club in January with another 3 people visiting us recently. Paul Kirkup presented a very interesting overview of Birmingham Trams. The N Gauge group are now started running nights on the 2nd Wednesday of the month not to mention the high level of activity in planning Wickwar. The O Gauge running track has been extended by adding 2 new straights. Lots going on I think you will agree.

## COMMITTEE FEEDBACK

- A committee meeting was held on 11th Jan 2012. This was the first meeting to include the new members of the committee elected at the AGM.
- The bank mandate for the club HSBC account has been updated for the current committee membership.
- The committee has agreed to co-ordinate all club publicity using an annual plan. This is currently being finalized. We will need club members to get involved with individual items in the publicity plan to ensure we maximize our efforts throughout the year. Watch this space.
- Will all members note that we are going to dispose of all the old magazines stored in the clubroom cupboards to provide space for items currently stored downstairs. If you want these magazines please take them - this is your last chance before they are taken to the skip.
- We are restarting the programmed to improve the website as the previous attempt has failed. Up to date photographs of layouts are required so please get snapping.

## PROGRAMME FOR 1Q12

Date	Event	Subject
<b>January</b>		
Wed 4	O gauge running night	O gauge running track
Wed 11	N gauge running night	Committee meeting
Wed 18	Presentation	Birmingham Trams by Paul Kirkup
Wed 25	00 gauge running night	
<b>February</b>		
Wed 1	O gauge running night	Weydon Road??
Wed 8	N gauge running night	
Wed 15	<b>Social evening</b>	Pancake night lead by Robin Baker
Wed 22	Presentation	Chris Webster photo show
Wed 29	00 gauge running night	
<b>March</b>		
Wed 7	O gauge running night	Weydon Road – test BR schedule
Wed 14	N gauge running night	
Wed 21	Presentation	TBA
Wed 28	00 gauge running night	
Friday 30	Club Annual Dinner	To be held at Anderson's Restaurant, Farnham (for details see newsletter)

## CLUBROOM TIDINESS

It is unfortunate that we have to raise this issue again but the clubroom tidiness has been degenerating recently. Layout baseboards are not being returned to the storage area, cleanliness of the work tables is poor and a portable TV was left behind last week. The committee have put a lot of effort into improving this area so would all members please respect the house rules (on the notice board). I would remind everyone that the committee reserves the right to "junk" anything that we consider a hindrance to the benefit of the membership.

Please be aware that there are a number of ideas being considered by the committee to improve clubroom further including reducing the refreshment area and redecoration. In the meantime would everyone please make every attempt to keep things tidy. Thank you.

## ANNUAL CLUB DINNER

Places at the Club Dinner to be held on Friday 30th March at Andersons Restaurant in Farnham are selling fast. We currently have 19 attending - the restaurant can only take a maximum of 34. So if you are looking for a good night out at a reasonable price please book asap. The booking forms with your menu choice can be found on the notice board.

## CLUB SUMMER OUTING

This year the club is trying to organise a social day out in the UK. It has been proposed that we visit the NRM Railfest which is on from 2nd - 10th June 2012, 9.30am - 5.30pm. Pre-booked tickets are £13 and discounts are available for groups of 15 or more. Obviously, we need to travel to York so there are 2 options: i) travel up by either train or coach on the day (very long day) or ii) travel over 2 days and stay overnight. Ideally, Thursday 7th and/or Friday 8th June would be best to avoid the Spring Bank holiday and weekends.

If members are interested, could you kindly contact either the Chairman or Secretary by the end of Feb with your preferences (travel/date).

## EXHIBITON DIARY

### Club layouts

- 4/5th Feb - Basingstoke at Stafford
- 10/11th Mar - Weydon Rd at Basingstoke
- 7th May - O gauge Open Day
- 12th May - Brixcombe at Loddon Vale

### Exhibitions of interest

- 11th Feb - Newbury MRC
- 18th Feb - Tonbridge MRC
- 18th Feb - Narrow Gauge South West, Shepton Mallet
- 18/19th Feb - Watford finescale
- 25/26th Feb - Solent MRG, Eastleigh
- 3rd Mar - Abingdon MRC
- 17/18th Mar - Nottingham MRC

## ANNUAL EVENTS

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

- The club annual dinner. Planned for the evening of Friday 30th March (see page 1).
- The O Gauge open day. To be held on Bank Holiday Monday 7th May.
- Summer club outing. This has been put forward as something we may want to consider - please see page 1. We will then organise accordingly if sufficient members are interested.
- Wellington Centre publicity. Planned for the weekend of 8th/9th September.
- The modelling competition. Planned for the evening of Wednesday 19th Sept.
- The Club Exhibition. To be held on the weekend of 13th/14th October at The Connaught Centre, Aldershot
- The club open day. To be held on Sunday 4th November. The club layouts being erected will be Weydon Road (O), Brixcombe(P4) plus a small private N/OO layout.
- The photographic competition. This will be organised by Astolat MRC in Mid - November.
- The 2011/12 AGM. This will be held on Wednesday 5th Dec in the main hall at the clubroom.

## LAYOUT ACTIVITY

**N gauge group** - The N gauge group enjoyed a successful outing with Basingstoke to the Stafford show over the weekend of the 4/5<sup>th</sup> Feb, despite the weather attempting to throw a spanner in the works with heavy snow in Stafford on the Saturday night making the journey back to the hotel a bit "interesting". An empty Transit Luton is not what you would describe as "transport of choice" in such conditions! They closed the show early on Sunday and the journey back was no problem, but more snow back in Farnham also meant we weren't going to risk getting the van stuck in the car park and so we had to cart the layout down to the clubroom down the very slippery ramp from the road. Apparently we do all this for fun..... Our appearance saw another invite, to Spalding in 2015, so that's another 3 years we have to keep Basingstoke going. We've come back from Stafford with a few issues to sort, but once they have been rectified, things will be a bit quiet on Basingstoke whilst we concentrate on Wickwar. The new canopy just made it in 75% complete form for Stafford but needs finishing off as well.

Progress on Wickwar has seen the track and baseboard layout just about sorted, and we are just about to start experimenting with baseboard construction using a combination of laminated thin plywood with a dense foam core. This we hope will give us a rigid but much lighter construction. A visit to Wickwar itself has been organised for the 20<sup>th</sup> March, with a visit to the brewery planned (purely for research purposes, obviously) and meetings with other contacts that we've established with the parish council etc. and a bit more photography of the terrain etc around the station itself. This is why the N gauge group traditional picks prototype locations, the research is all part of the fun.

**OO gauge group** - A busy month for us with our attendance at the Egham MRC show. We loaded Friday, arrived by 8.00 am Saturday to find that half the stands and layouts had been assembled the night before. We also thought that we were to be in a side room which was full of furniture. Anyway, things got sorted and we were placed on the stage next to the refreshments but with our signboard facing the wall! The attendance was good, plenty of favourable comments and even a booking for Beaconsfield in 2013. On the operating front, there were a few mechanical hiccups. The electrics behaved themselves but we shall have to have a speed restriction imposed especially in the fiddle yard.

On a high note, Nick won first prize on the tombola - a complete Flying Scotsman set with track and controller. I think that made his day.

**P4 gauge group:** Work on the layout has continued through January, albeit at a slightly gentler pace as two members of the group succumbed to winter colds and took time off from club nights. After much debate and thought it was decided to relay the turnout into the engine shed road and that from the engine shed to the turntable. These have given us ongoing problems with certain loco types, particularly 4-4-0s and, having improved running elsewhere, this measure should give us consistency across the layout. These new sections now need to be wired up and tested.

Jim has produced the first two sections of the backscene and we took advantage of the arrival of the first one to organise a photography session, courtesy of Richard, to produce some images for the website and publicity. These look very good and we will be posting them to the website shortly. As Jim is off to the USA through February, the emphasis will be on progressing the signals, tidying up the electrics and the operation of the turntable.

**O gauge group:** Members of the Group have decided on the track plan for the proposed new small layout. The next hurdle is to settle who wants to do the building and will be available. Work can get in the way and luxuries like food and a roof are priority requirements. The outings are building up, Newbury for the Test track on Saturday 11th February, Weydon Road to Basingstoke on 10th/11th March running B.R. stock. The O-Gauge Open Day will be on Monday 7th May. Remember, if you are not operating you will have to pay to come in!

## COLIN'S PROJECT

You may have seen several of the OO Group busy sawing, screwing and gluing in one corner of the hall in the afternoons being watched by Colin from his wheelchair. He has approached the group and asked us if we could help him build a small layout of Milford Haven Docks. The plan has been taken off a website and consists of a small quay with shunting tracks and a crane. The whole layout is 6' x 2' overall and is very portable to fit in his estate car. Colin has several ideas on the build which he wants to incorporate so he is coming up with ideas as well as the finance. About 4 members are supplying the muscle. Eventually it is hoped to submit the whole project as an article to the Railway Modeller or Model Rail

## AN INTRODUCTION TO NARROW GAUGE MODELLING

By Julian Evison

### Part 3 – 009

There is some debate over the origins of 009, but it started to gain popularity in the mid 1960s when Eggerbahn and Jouef ready to run stock (strictly H0e) became available. A number of layouts appeared, but rather too many were the rabbit warren type (which I happen to like) or rather kitsch bits of whimsy (not my cup of tea). A major problem was the running quality. The RTR items were low quality and 009 modellers have a long history of finding cheap (or very second hand) N gauge chassis to adapt. Neither is a recipe for success, so while it is very possible to get excellent running with 009, the legacy is still with us.

Today ready-to-run is available from Roco and Liliput, but their focus is very much on Austrian prototypes. The standards of finish and running are comparable with standard gauge RTR, but the choice is limited. British outline RTR is almost non-existent, though Paul Windle does batch build locos on commercial chassis, but he has a long waiting list. There is quite a range of locomotive kits from companies such as Gem, Chivers, Meridian, A1 Models, and Nigel Lawton. These are mostly whitemetal, though the last two are etched brass; most fit on commercial chassis, some of which are very hard to find. For rolling stock, Parkside Dundas is the main producer of plastic injection moulded kits with a few more coming from Meridian. There are some resin kits from Gramodels and models produced by 3D printing are becoming available.

While many 009 modellers are content with this range, there is a strong tradition of scratchbuilding in plasticard or brass on n gauge underpinnings or kit-bashing N gauge offerings. The former requires a little bit of skill while the latter can be lots of fun. The 009 Society unites this branch of the hobby producing a monthly magazine with many local area groups, e.g. Surrey Narrow Gauge Modellers, and an exceedingly well run second hand department.

Finally a few layouts to look out for an exhibitions: Purbeck (ball clay mining in the 1950s); Clydach (contemporary preserved narrow gauge railway); Tan Y Bwlch (scale depiction of Festiniog Railway in 1890s); Kingston Regis (1930s English village); County Gate (imaginary extension of the Lynton and Barnstable in the 1930s); Gairloch and Wester Ross (extensive 1950s Scottish layout); and Roestok (South Africa in the 1980s).

### Part 4 – O-16.5 and On30

As mentioned previously, while closely related O-16.5 and On30 differ in the actual scale applied – O-16.5 at 1:43.5 and On30 at 1:48. Both run on 16.5mm gauge track so can use proprietary 00/H0 mechanisms. On30 has received a massive boost in popularity from the availability of the Bachmann range of ready to run equipment. This started with logging railway equipment and featured both Shay and Climax locomotives (Heisler to come soon). The range has expanded with a variety of conventional locomotives aimed towards western themed locomotives plus some Forneys for those wishing to model the Maine 2 foot gauge railways. All the models are beautifully detailed, run well and represent excellent value for money. An industry has grown up around this range offering add on parts and extra equipment, two UK based companies being Chivers and Backwoods Miniatures. Unsurprisingly this had led to a rash of North American logging or western layouts, a few of which are excellent.

In contrast to On30, there is next to no ready to run equipment available for O-16.5. Smallbrook Studios offer a very easy way in, however, with simple resin kits on Hornby O-4-0T chassis (but be careful not to get the version which has the Scaletrix motor!) Two substantial ranges of whitemetal and/or brass kits were available from Wrightlines and Agenoria, but both have recently disappeared from the market following business sales by the original owners. Peco, Mercian, Springside and EDM have locomotive ranges which are currently available and Chris Ward is coming to market with 3D printing kits.

There is also trade support for O-14, representing true 2 foot gauge and generally to fine scale standards. KBScale are the main suppliers here.

The 7mm Narrow Gauge Association has an active membership with regional groups (a particularly strong one in Surrey) and a nicely produced bi-monthly magazine. The Association sells some specialist modelling items, a good range of 'How To' guides and very nice books of drawings of stock, building and other railwayana suitable for all scales. It also has a second hand operation.

Once again I close with a list of a few layouts to look out for on the exhibition circuit: Pempoul (French 1:50 scale layout by the Gravetts – for my money the best layout of any scale or gauge on exhibition at the moment); Gretton and Wenlock (freelance O-16.5); Hayesden (an O-16.5 winter scene set in Kent); Bridport Town (a Dorset 'might have been' in O-16.5); Layout with No Name (Mexican On30 – look for the cemetery); Red Rocks Railroad (small circular On30 logging layout with spectacular trees) and Purgatory Peak (a large On30 logging layout with switchback operation).

## MAGNETIC UNCOUPLING USING TENSION LOCK COUPLINGS By Clive Jackson

Many years ago I experimented with the first generation (non-delay) of Spratt & Winkle couplings which, using permanent magnets, was cheap, easy to install and fairly visually unobtrusive. I found that, when accurately adjusted these achieved a reliability of around 80 to 90% - commensurate with what I have observed when this type of coupling is in use on exhibition layouts. However, I eventually abandoned this approach as I found that the adjustment was very critical and the couplings were insufficiently robust, so that an event such as a derailment could result in a whole train load of couplings being bent badly out of adjustment. It subsequently occurred to me that if standard (for 00) tension lock couplings were extended underneath the vehicle, then by using two magnets, uncoupling could be achieved by means of a class 1 lever, the extension being drawn down by the magnet, causing the coupling hook to rise.

Unfortunately the pivot of the tension lock couplings in use at the time was well back under the buffer beam of the vehicle with the result that the extension had to be taken over the axle with a dropper, similar to that used by the Spratt & Winkle couplings, in order to get sufficient magnetic attraction to operate the coupling. The result of this was that although the coupling hook of the propelled vehicle behaved in the desired manner, the drag on the dropper caused the hook on the propelling vehicle to behave in an erratic manner. Although I demonstrated that the system would work in theory, I came to the conclusion that with the poor slow running of the ready to run 00 locomotives of the time the system was unlikely to work sufficiently reliably. Thus I abandoned it.

The experiment was consigned to history until I read an article in the modelling press towards the end of 2011 which referred to magnetically operated tension locks operating in a similar manner to that which I had tried. The system was attributed to Brian Kirby. The couplings were modified by adding domestic staples to the uncoupling dropper but the article gave no indication of the dimensions used. Possibly coincidentally, the Stockton Mill layout was featured on the Christmas disk provided with Railway Modeller which used the system. From this it was possible to obtain the dimensions used on this layout and I was surprised to find that the system would work with the steel actuator extending only as far back as the NEM pocket. Two changes have occurred since the days of my experiment – modern tension lock couplings pivot outside the buffer beam so the extension can be much shorter and the locomotive offerings from the likes of Hornby and Bachmann have greatly improved slow running characteristics.

The initial experiment wrote off a Bachmann coupling as heating the dropper to solder on the actuator caused the plastic parts of the coupling to melt. During the next attempt, the hook/dropper section parted company with the loop, so it was soldered on its own. Re-assembling the coupling proved a little challenging as the pivot on Bachmann couplings consists of two legs on the hook which poke through holes in the loop section and barely protrude. These have to be bent by just the right amount – too little and the coupling comes apart, too much and the coupling is too stiff to work correctly.

The Hornby coupling uses a different design and it appears impossible to separate the hook and loop but the plastic they use seems more resistant to heat, so the Hornby type is easier to work with and I will standardise on it. Additionally, I will standardise on the medium size loop to avoid the danger of the hook sliding down the side of the loop as frequently happens with the couplings which now tend to be fitted.

I set up a test bed using a yard of C & L track on a simple board. In the centre, the sleepers were removed and a tin lid fitted in a hole in the board, which enabled the Spratt & Winkle magnets to be varied in position and height. Initial tests showed promise, but the free running nature of modern stock resulted in the vehicles moving due to the attraction of the magnets, which both hindered uncoupling and tended to result in unwanted uncoupling when a train was drawn over the magnets at realistic shunting speeds. This may account for the unrealistically high shunting speeds and acceleration used on the Stockton Mill demo. This problem was overcome by the addition a resistance pad consisting of a piece of synthetic sponge glued on the floor of the vehicle so as to rub on the axle. Two axles need to be treated thus in order to get sufficient rolling resistance for the system to work reliably. It was found that the best results were obtained with the magnets positioned at right angles to the track and with their magnetic fields opposing. Tests have indicated that a reliability in excess of 90% is possible and that there is a fair bit of tolerance on the dimensions of the steel actuator. Unless the actuator happens to catch in something it is unlikely to go out of adjustment and of course the couplings themselves are very robust. So I have high hopes that the system will prove reliable in service without the need for continual adjustment. The operation of the coupling is shown in figure 1.

Clearly the increase in rolling resistance is likely to have a detrimental effect on the length of train that can be pulled. This problem can be ameliorated by running wagons in fixed cuts, or coaches in fixed rakes, in which case only the end couplings require modification, and a long train can be operated with relatively few resistance pads.

One disadvantage raised in the article referred to above, is that the system does not support delayed uncoupling. With a permanent magnetic uncoupling station costing less than 10% of an electromagnetic uncoupler it can be argued that this is only a minor disadvantage. I decided to explore the possibilities of a delay system. The second idea I tried proved successful and is shown in figure 2. This consists of a "delay bar" mounted on the bottom of the uncoupling dropper and running under the hook rising at a slight angle to it. This has to be non-magnetic, so I made mine from the solid core copper conductor from flat twin "bell wire", reinforced by copper tube. This has proved a good arrangement, as the tube ensures that the delay bar does not bend, but a short piece of unsupported copper wire near the dropper allows the angle of the bar to be adjusted. Figure 3 shows the coupling under tension, the curve of the hook preventing the coupling from rising under the effect of the magnet.

When the wagons are propelled over the magnets the hooks rise, as with the non-delay system, but the delay bar catches under the hook of the other coupling so the delayed coupling rises only to an intermediate position (Figure 4). As the engine or train draws clear the resistance pads hold the vehicle in position (Figure 5). Once the engine or train is clear, the delayed coupling rises fully (Figure 6).

When the train is propelled back onto the wagon, the hook slides under the delay bar, preventing the couplings from engaging (Figure 7) thus the detached wagon/s can be propelled clear of the magnets without coupling (figure 8). During this manoeuvre high rolling resistance is again important since any snatching of the couplings will result in the propelled vehicle running clear allowing the delay bar to drop. Once the engine or train moves away, the delay bar is released and the coupling drops to its normal position, ready for re-coupling. (Figure 2).

Note that the delayed coupling must be on the propelled, rather than the propelling vehicle for the delay facility to operate. If the delayed coupling is on the propelling vehicle, standard non-delayed coupling will normally result. Tests with both couplings using the delay bar, have suggested that uncoupling is unlikely to work successfully in this configuration. Thus there is a degree of asymmetry in the system if the delayed version is used.

One disadvantage of the system is that it renders the couplings unsuitable for use with mechanical uncouplers, as there is a high likelihood of the actuator fouling the uncoupling ramp, in which case the whole vehicle is lifted up rather than the coupling operating. Because of this, I will probably use a loop only coupling on locos – as in the photos, so that they are compatible with either system. This arrangement also aids uncoupling by hand if this is necessary and prevents stray fields from the motor from interfering with the magnetic uncoupling system. A further advantage is that if locos inadvertently collide in an MPD they will not couple. Obviously if double heading is required, the tender of the first loco needs either a magnetically or mechanically actuated hook.

Editor's note: Sorry there are no picture as they could not be copied across.