

# WHISTLEBLOWER

## THE NEWSLETTER OF THE FARNHAM & DISTRICT MODEL RAILWAY CLUB

04 April 2021 – Edition No 7/21

### FROM THE CHAIRMAN – Mike Le Marie

It seems that the Covid restrictions are slowly being eased and we can start to look forward to meeting again in our newly refurbished club room. There are some photos of the club room published in this edition and I would like to express my personal thanks to all those members who worked extremely hard to achieve such a superb result.

**Cutting Mats.** Clearing all the desks in the club room prior to refurbishment revealed the poor state of many of the A3 cutting mats. It is therefore being proposed that we should purchase some new mats. In order to get the best price, it may be necessary to order a colour other than green ie red or blue. They would still be 3mm thick. Before coming to a final decision, I would like to find out if there is any opposition to buying a colour other than green. If you have strong feelings about the colour then please contact me either on 01252 449265 or by email at [chairman@farnhamrc.org.uk](mailto:chairman@farnhamrc.org.uk)

We are of course now allowed to meet in groups of 6 outside and the N gauge group held 2 sessions this week. It was great to meet up again and as the weather improves other groups may want to organise get togethers and even put up some boards.

Now for something silly to finish with. Imagine you have just died and have arrived at the Pearly Gates (assuming you are sent in that direction!) and you are told that there are some model railway layouts in Heaven. You are allowed to return briefly to earth to collect any 6 locomotives from your collection. Write in to Whistleblower and say which 6 locomotives you would choose and why.

### EDITORIAL – Jon Faulconer

Happy Easter, albeit currently an artic one. Despite the weather, I am sure many of you will be taking advantage of the relaxation of COVID restrictions and planning family BBQs, at least they will only be in fleeces and not the full wet weather gear customary for English BBQs.

Last Wednesday, with southerly warmer weather, Andrew Wrobel hosted a BBQ followed by a Tea Party for 2 parties from the N Gauge group. It was great to get together with friends to enjoy the banter and camaraderie, we even discussed more fundamental topics including the next N Gauge exhibition layout. The time passed quickly, I regret I forgot to take photos of the gathering. Many thanks to Andrew for kicking things off and let's hear of get-togethers by other Groups and, unlike me, appreciate some photos.

Noel Leaver has advised a link that may be of interest – <https://gb.readly.com/>  
It costs £8 per month for the right to read about 5000 magazines and other publications online includes BRM, Model Rail, and Hornby magazine, as well as a couple of German model railway magazines and one I've never come across – 'Railway Magazine Guide to Modelling'. There are about a dozen magazines on the real railways. Lots on other subjects that might appeal to others in your household like gardening, cooking, home furnishings, computers. Even the Beano!

Finally, the next issue of Whistleblower will be 18 April, so please let me have your articles by Saturday 17 April.

## CLUBROOM REFURBISHMENT PART 3

The refurbishment is complete, having been project managed by Wilf Pateman. All that is necessary now is for the Members to be let loose and make it untidy once more. Before we do so and for the record, below are some photos of the room in its now pristine condition:



## **CONFESSIONS OF A LOCKDOWN MODELLER - Anon**

At first it was novel. It was great. Nothing to do all day and all day to do it in. Daytime TV with meals served regularly (and frequently) by Her Indoors. Forbidden by law to visit Marks and Spencers. Crates of 12 delivered to the door. Only another few weeks to my turn for the job. So, bring out the kits which, with admirable foresight, I've been saving up for just this scenario.

Twelve months on and it's all gone to pot. Lunchtime TV is full of Anita Manning (her of irritating knee bending, hand waving, random brogue emphasis). Mealtimes are unpredictable. Tension is in the air over whose turn it is to use the dining room table and I'm down to my last kit. And I've run out of glue, beer and enthusiasm. My prevailing mood is "what's the point?". Mañana rules OK?

No. Well, not quite yet, anyway.

Getting hold myself by the scruff of the neck I shook off lethargy (which, in any case, was not my fault – it was a hang-over from that bloody Astra-Zeneca stuff). Gritting my manly teeth and stiffening the sinews I bagged the dining room table when She wasn't looking, loaded up with files, knives, paints and brushes, remembered the cutting mat at the last minute and opened the box containing that A1 Models 3D print railbus. The £36 price tag on the box screamed at me but I spotted it just in time and was able to erase it before interrogation by the Spending Constabulary. Nice kit – and tailored to the Kato 11-103 tram chassis too, a sample of which I knew I had, if only I could find it. Happily, I could: safely tucked away among relevant stuff like sandpaper, masking tape and two non-heating soldering irons that I-can-fix-and-will-source-the-necessary-parts-just-as-soon-as-I-get-round-to-it. What follows is a self-exculpatory account of the next few days. Typically, I forgot to take photos throughout the build process, but stay with me.

Setting up the table-top for such skilled work naturally took time. So, I was justified in taking a breather. After all, I had the whole of tomorrow to begin work.

Tomorrow morning, I was very busy doing something or other – can't recall what, exactly, but I know it necessitated a restorative G&T and the release that comes from yelling obscenities at Anita Manning. Then the Astra-Zeneca consequences struck again, and a gentle snooze was indicated before supper.

In the morning I was seized with such modelling zeal that, before you could say "Jack Wosname", I had taken a file and some fine sandpaper to the shallow ridges left on the 3D print. This is, of course, rather a tiring exercise so I felt justified in taking a short break. I filled in what was left of the day by thinking deeply about the things I must do to complete the model and the order I must do them in.

In the morning I wrote them all down – spray an undercoat; spray at least one topcoat; check to see if I had the right paint; touch up the bits that needed highlighting, find a driver-figure, install glazing, find that roll of trim lining, change couplings on the Kato chassis – you get the idea.

In the morning I went to look for my spray-gun and associated jars, bottles, holders, turntable, rags, thinners, kitchen roll, plastic gloves and big cardboard box to serve as a poor-man's spray booth. I laid everything out neatly on the table-top alongside my task list and admired my thoroughness.

In the morning I brushed on some white undercoat. While it was drying, I cleaned my spray-gun, which had mysteriously infested itself with rock-hard paint since I last used it in 2017. I used a lot of special de-gunging liquid and a lot more ordinary thinners. After a few hours I was able to re-mantle all the little springs and washers. Consumed with triumph I gloved up, filled the little hopper with yellow paint, assembled my cardboard box, held the model with one hand and the gun in the other and pulled back the trigger. Nothing. Tried again. Still nothing. Then a splutter of yellow followed by a burp. I cleaned the dining room table a bit with some turps.

In the morning, I could do nothing because the paint was tacky.

In the morning, the paint was still tacky.

But the next day I was able, with only a few faint fingerprints that probably won't be visible except under a strong light, to paint the radiator grill black. I also sprayed a second coat to cover all the areas where the first coat hadn't taken. I spent the rest of the day cleaning my spray gun and the dining room table. It took only a few hours.

To be on the safe side and to avoid any residual attacks by Astra-Zeneca, I allowed a short break of a few days before tackling the next job on the list – mounting a driver. Somewhere in the garage I knew there was a box containing one or two train crew packs. There are a lot of boxes in the garage. I therefore decided to take a break from major modelling activity and spray-gun cleaning for a few days while I tried to recall which box might yield the required results. But I was far from idle! Not me! In the interval I constructed a card-strip that I could glue inside the model from side to side to provide a seat for my driver once I had found him – (apologies for this offensive sexist usage, but, as you will soon see, my driver turned out to be wearing the sort of tatty black BR-issue cap that no self-respecting other-gender would be seen dead in). Hot Tip No 1. I cunningly glued a short piece of piano-wire under the card strip to prevent it sagging under the driver's weight (even though I had to cut off his feet and legs to enable him to fit). Hot Tip No 2 – Don't glaze the windows before inserting the driver – glue gets everywhere but your tweezers won't.

And now for my pinnacle of achievement! All this fiddling with the driver's seat, etc, took its toll on my nerves, so much so that in mid-fiddle I broke a headlamp spigot. But, rising to the challenge, I was able not only to retrieve the miniscule item from the floor (three times!), drill a tiny hole using one of those drill bits that are so thin anyone over the age of 80 can't even see it, and insert a bit thinner metal pin to replace the slender 3D printed spigot. As I washed the blood off my fingers, I reflected that there's nothing like a triumph to restore self-esteem!

You will appreciate just how exhausting all this detailed modelling was, and therefore understand how important it was to take another short break. After all, even the Sussexes understand how damaging to one's mental state such attention to detail can be.

However, eventually I was able to decide that the paintwork was sufficiently dry to permit a photograph of the finished project, sitting proudly on its Kato chassis. Please note that my contact details are withheld from this account – I don't feel up to dealing with a flood of congratulatory and admiring emails!



## TV & RADIO AERIALS – Noel Leaver

I've been producing an etch of TV aerials in N and had to learn a lot about the history of TV and radio transmissions in the process.

You view most layouts from above, and TV aerials are particularly prominent. Transmission frequencies and hence aerials have changed over the years, so you need to know what would have been in use in the period you are modelling. The BBC aerials on each building will point in the same direction towards the transmitter, and similarly all the ITV aerials to the ITV transmitter.

The basic and simplest aerial is a dipole, two straight rods each (usually)  $1/4$  the wavelength of the transmission being received. For BBC TV on VHF this was about 5ft + 5ft, aerials for higher frequencies are smaller than this. It receives equally from all directions.

For better reception, and freedom from ghosting, a directional Yagi aerial is common. It has a dipole as the receiver, often a folded dipole which is two parallel dipoles joined at the ends in a loop. Behind the receiver is a reflector dipole, which is sometimes slightly longer. In front of the receiving dipole are any number of passive director dipoles, the same length as the receiver. There might be no directors at all, or there can be 16 or even more. The elements are usually spaced at  $1/4$  wavelength (the length of each arm of the dipoles) apart. The simplest type, often used for low frequencies, is the H aerial, with just a receiver and reflector. X and K shaped aerials are essentially the same with the arms bent. For higher frequencies most aerials in the UK are Yagis with multiple directors and multi-element reflectors. Some use pairs of dipoles in a squashed X to or flat rectangle give wider bandwidth. Yagi aerials are described by the number of elements in total, so a 10 element aerial has a reflector, a receiver, and 8 directors. On modern aerials the reflector is often a stack of several dipoles twice the length of the receiver, or equivalently a metal grid.



*This photograph shows two early aerials and a modern one.*

*The largest is a 3 element Yagi aerial, similar to the more common H aerials, but with an extra director element. It is for BBC VHF reception and is vertically oriented, as was usual for BBC.*

*Attached to the same mast is a 7-element Band 3 Yagi VHF aerial for receiving ITV. This is mounted horizontally, the commonest ITV polarisation.*

*Both these aerials have 'folded dipole' receiver elements - a pair of parallel arms connected at the ends.*

*At the back is a modern UHF aerial with about 20 elements. the reflector at the back is a grid of several dipoles and wider than the other elements. The aerial is mounted using a bracket in the centre, common now for large aerials to reduce the chance of damage in a strong wind.*

Of similar appearance to a Yagi, but different in operation, is a log-periodic antenna. This has a row of dipoles like a Yagi but they increase steadily in length from front to back, and all are receivers (that is, wired to the TV receiver). The design is able to cover a wide range of frequencies with a single aerial, but has lower gain. They are commoner in the US than in the UK.

If close to the transmitter an indoor or attic aerial will suffice, so there will be few external aerials.

Transmissions are normally polarised either vertically or horizontally: the aerial needs to be correctly oriented. BBC band 1 VHF was usually vertical, most other TV transmissions are horizontal. However, if a relay station is used, for example in hilly areas, it usually transmits with the opposite polarisation to the main transmitter.

This web site has a lot of pictures of different (old) aerials and satellite dishes:  
<http://www.wrightsaerials.tv/aerialphotography/ancient/>

## **VHF TV**

The BBC (BBC1 from 1964) used VHF band 1. The transmissions were polarised vertically.

The BBC started transmitting in 1936 from London, and most aerials were simple dipoles about 10 foot long. From 1950 transmitters were built in major cities. H and X aerials were common, K was occasionally used. Away from main cities, particularly in hilly areas, there might be no coverage. By 1960 relay stations had been built to give most areas access.

ITV started in 1955 on VHF band 3 which requires smaller aerials, with dipoles about 3 foot long. Transmissions were horizontally polarised. Yagi aerials with five or six elements were common.

Band 3 was used by the BBC as well in some areas.

In 1969 colour transmission of BBC1 and ITV started using the UHF band. Use of VHF declined in the 70s, with transmission ceasing in 1985. But VHF aerials were left on chimneys long after 1985, there are still a few around.

## **VHF Radio**

VHF band 2 is used for FM radio. Transmissions in the UK started in 1955, but it only became popular with commercial stations from 1973. It was originally horizontally polarised, but now mixed polarisation is used.

When transmission of VHF TV ceased, band 3 was reused for digital radio (DAB). It is always vertically polarised.

Most radios use an indoor aerial, but for best reception or in remote areas an external aerial may be used - in my area of outer London about one house in five has one. For FM the commonest type is a the omni-directional halo design, a dipole bent into a horizontal circle with the ends not quite meeting. For DAB radio a vertical dipole is commonest, but sometimes a log-periodic aerial is used.

## **UHF TV**

UHF is now used for all terrestrial TV, including digital.

UHF aerials are normally of the Yagi type. They typically have 6-17 dipoles mounted in a row, with a stack of reflector dipoles on the end mounted, at right angles to the rest of the

dipoles. There are many designs of reflector, such as a number of longer dipoles above and below the main line, or a rectangular grid. The reflectors are normally in a slight V shape, angled to face a point at the front of the aerial. They are often twice the length of the receiver dipoles.

BBC2 started transmission on UHF in 1964. Colour TV for BBC1 and ITV was introduced in 1969, with Channel 4 being added in 1982 and Channel 5 in 1997. Digital terrestrial TV was introduced in 1998, from 2002 as Freeview.

Take-up of UHF was slow while it was only BBC2, but it became dominant in the 1970s and VHF transmission ceased in 1985.

Sometimes the UHF transmitters were in new locations, with different relay sites, so the aerials for VHF and UHF might point in different directions.

While the length of the dipole elements should match the transmission being received, in each area the different stations would be allocated frequencies close together so a single aerial could be used, although usually two were needed as the BBC and ITV transmitters were in different directions. In places close to the boundary between two transmitters, properties might have an aerial pointing at each transmitter, so that different regional programs could be received, especially for ITV.

### **Satellite Dishes**

The same satellite and hence dish is used for both Sky and Freesat. The dishes point roughly SSE and upwards at about 25 degrees.

Reception is better in the South of England and the Midlands (Zone 1) and a 45cm diameter dish can be used, but in the North of England and Scotland (Zone 2) a larger 60 cm dish is needed. Often a larger dish is used to improve reception in rainy weather. Early dishes were solid and circular, but modern ones are usually black mesh and often oval: 45 cm x 60 cm seems a common size for zone 1, 60cm x 80cm for zone 2.

## **NEW LAYOUT UPDATE Part 7 – Jim Edwards**

*Jim has forwarded some more photos of the progress he is making with his new layout:*



The hills were painted with the Devon soil colour.



Next, I drilled and fitted the fence post. Static grass was fitted next . First was 2mm medium green from Woodland scenic and then 6mm straw colour from Peco.

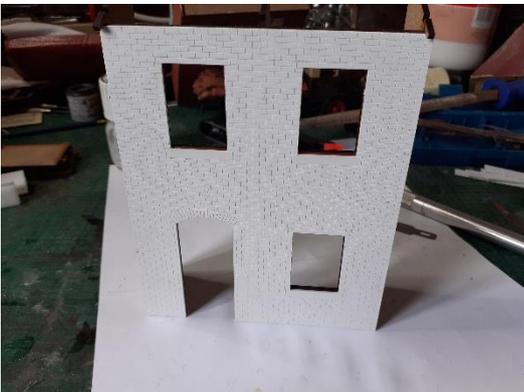


The fence wire was pushed through the holes and glued into place.

Behind the hill I, made a road with low relief houses. The road was made with watered down PVA glue spread out and sand sprinkled on top. When dried painted grey and black.



I brought some low relief house kits from York models and these have now been started.



## AND FINALLY, ENGINE SHED QUIZ -Mike Le Marie.

Here is a quiz which will either stir a few memories or require a bit of research. Listed below are the names of BR steam locomotive depots of the 1950/60's. Can you name the town or city they were located in.

1. Longsight
2. Edge Hill
3. Bescot
4. New England
5. Eastfield (also Polmadie and Corkerhill)
6. Kingmoor (also Upperby and Canal)
7. Bowes Bridge
8. Bricklayers Arms
9. Laira
10. Dairycoates (also Botanic Gardens and Springhead)
11. St Margarets (also Haymarket)
12. Bath Road
13. Colwick
14. Holbeck (also Neville Hill)
15. Devons Road

Answers next time.

## F&DMRC DIARY

### Recent changes.

Clubroom available from ~09:00 [use rear entrance].

Wednesday running starts at **14:00** in Wrecclesham Community Centre Hall.

**'Run'g' = Priority use of Hall; ALSO Tidy/vacuum Club Room AND Lock up**

Runn'g Sequence: O, N, P4/009 and OO

DIARY 2021 – ALL are subject to change / cancellation		
Date	Run'g	Event / Layout at Exhibition/Show
Sun 04 Apr		Easter Sunday – Go/No-Go decision on <b>OO9 Show</b>
<i>The following are known about events / Shows – all subject to change</i>		
Mon 03 May		<b>Early May Bank Holiday</b> – Open Day <b>CANCELLED</b>
Mon 17 May	OO9 / P4	1 <sup>st</sup> probable Rule-of-6 <b>Clubroom</b> gathering [a 'Daily Admission Rota' will be posted in mid-April]
Wed 19 May	N	1 <sup>st</sup> probable Rule-of-6 <b>Clubroom</b> then <b>Hall</b> at 14:00
Mon 31 May		<b>Spring Bank Holiday</b> – usually a Group Open Day – TBA
Wed-02-Jun	OO9 / P4	2 <sup>nd</sup> probable Rule-of-6 <b>Clubroom</b> then <b>Hall</b> at 14:00
Wed-09-Jun	O	3 <sup>rd</sup> probable Rule-of-6 <b>Clubroom</b> then <b>Hall</b> at 14:00

03-Jul		<b>Haydon Square (O):</b> Beaconsfield MRC Show, Beaconsfield School, Wattleton Road, HP9 1SJ
14 Aug		Evening preparation for <b>Farnham OO9 Show</b>
15 Aug		<b>Farnham OO9 Show</b> (OO9 Society & others invited): WCC Hall
Sat 11 & Sun 12 Sep		<del>REC (Railway Enthusiasts Club), Woking</del> <b>CANCELLED</b> <b>TINGS</b> (The International N Gauge Show, Warwickshire Event Centre, CV31 1XN [As at 26-Feb: Advance tickets not yet avail.]
Wed 06 Oct	<b>ALL</b>	<b>Briefing for Show 18:30</b> in Clubroom/Hall
Fri 08 Oct	<b>ALL</b>	<b>Set-up Club Show</b> – <i>from late afternoon</i>
Sat 09 & Sun 10 Oct	<b>ALL</b>	<b>F&amp;DMRC Annual Club Show</b> , Aldershot [Most of the layouts that were invited for 2020 will be attending.]
Sat 27 & Sun 28 Nov		<b>Model Railway Show: Warley</b>
Wed 08 Dec		<b>19:15 for 19:30 start - AGM</b> (details to follow) [within 2 months of Club's year-end; voting only for paid-up 'Full' members].
Sat 11 & 12 Dec		<b>Wickwar (N):</b> Manchester MRC, Barnes Wallis building, Manchester, M1 7JA <b>Decision by MMRS mid-July earliest</b>
Wed 15 Dec		Dinner (optional) 18:30 for 19:00 @ The Mill House, Odiham
Wed 22 Dec		<b>Last Club Day of the year</b>

DIARY 2022 – ALL are subject to change / cancellation		
Date	Run'g	Event / Layout at Exhibition/Show
Sat 05 & Sun 06 Feb	--	<b>Wickwar (N):</b> Alton
??		<b>Brixcombe (P4):</b> a Show somewhere (tba)
Sat 25 & Sun 26 Jun	--	<b>Wickwar (N):</b> Perth Show
Sat 10 & Sun 11 Sep	--	<b>REC</b> (Railway Enthusiasts Club), Woking Leisure Centre
Fri 07 Oct	<b>ALL</b>	<b>Set-up Show</b> – <i>from late afternoon</i>
Sat 08 & Sun 09 Oct	<b>ALL</b>	<b>F&amp;DMRC Annual Club Show</b> , Aldershot [Wickwar and ??]