Smokebox

The Newsletter of the **Bedfordshire Area Group** of the
Association of 16mm Scale Narrow Gauge Modellers

From the Editor

Those who monitor or participate in the Association Facebook page or watch Shed Notices may have noticed the announcement that the Association will partner with Warners Group Publications to deliver the next National Show on Saturday 25th April 2026 at Stoneleigh Park. I've written a full explanation of how this has come about for inclusion in the August issue of Bulletin. If having read this you have any questions, by all means contact me. This change will see me involved in preparation for the show for another year but I hope to be able to bow out fully after the 2026 show. I'll have completed two visits to the W&L by the time you read this. During the first, 17th-19th June, we ran a steam service on the Tuesday morning but sparks from the loco ignited the lineside in five different places. We put the fires out at the expense of a much delayed arrival back in Llanfair, after which we ran a diesel service for the rest of the week. Sadly there really is no alternative in really dry conditions.

Copy deadline for **August 2025** issue of Smokebox**: Friday 25 July 2025**

Alan, Smokebox Editor

From the Chair

A bit of a mixed bag this month, so bear with me!

Our June meetings a great success although rather unbelievably at least one member chose to go to the Roundhouse open Day! What can I say? We were sorry to hear that Graham was not up to travelling so we put up Eaton downs to cater for both gauges. We had some really interesting locomotives running during the day. Luckily I managed to photograph a few of them. Max started the ball rolling with a gauge "0" mainline loco, a fairly new model of an "N" class 4-6-0, originally SECR apparently, he ran some prototypical stock behind it.

I saw Denise at Stoneleigh when she was clutching an anonymous box - it was revealed as a rather nice IOM locomotive. It would seem that it had suffered internal gumming up because Ted helped free it up with some spirited running.

Pete Elvy arrived with a rake of Sandy River logging wagons, pulled by a nicely weathered locomotive where they really looked the part. He did tell me the maker but my phone keyboard defeated me.

Max again was in the spotlight with an intriguing New Zealand Bush Loco. Twin cylinder oscillating engine and vertical boiler. It ran very well and later in the run was seen to tow a good load.

Ian ran a pleasing example of Excelsior together with a rake of skip wagons, all well detailed.

RNLI SALE

Whilst all this was going on Geoff Evans set up stall at the rear of the room where he had a good display of 16 mm accessories for sale as a result of his decision to move on in the modelling world. He emphasised that all proceeds were going to the RNLI. Trading was brisk and after the meeting he sent me an email, an excerpt of which is included below:

Bob - many thanks for letting me clear out all my excess modelling stuff to benefit RNLI today. In total I raised £126.

You may care to extend my thanks in your newsletter to all the members who supported me to this wonderful extent.

I will not be able to come along to the July meet due to a previous commitment but I do plan to come to the August meet if that is still OK.

I noticed some 16 mm figures, particularly a scantily dressed female pirate captain, I mentioned Andrew Neals fondness for such characters and Geoff kindly passed the figure on to me for forwarding to Andrew. Put a reminder in your diary for the August meeting for Geoff's next visit!

TRACK VISIT

Dave Thompson placed an invitation in Smokebox last year for his Open Day on 14th June. I had not been before so was very pleasantly surprised to see such a charming and well thought out layout in a front garden, all credit to Dave. I thought the planting and scenery excellent. It was very well attended, I recognised quite a few of the faces!

I particularly liked the central "well" where operators could get down closer to track level.

MODEL ENGINEERING RALLY

An invitation received via my contact address on the web site:

Cambridge Model Engineering Society would like to welcome fellow model engineers to attend a rally at our Cambridge site on the 5th and 6th July, 2025. We run fully signalled ground level 7¼", 5" and 3½" tracks with both high level and low level steaming up bays with hydraulic lifts to help in loading and unloading locos.

If you are interested the address is:

Fulbrooke Road
Cambridge
CB3 9EE

Bob, Chairman

Meeting Dates

Here are all meeting dates until the end of 2025. We have access to the hall from 10.30 and need to have the layouts packed away and be out of the hall be 16.00.

- 6th July
- 3rd August
- 7th September
- 5th October
- 2nd November
- Saturday 22nd November - **Steam in Beds**

Garth, Secretary

Garden Railway Meetings

A number of BAG members attended Dave Thompson's open day on Saturday 14th June at the Chells Valley Railway in Stevenage. The day was blustery and bright and the event was also well attended by West Hearts members, resulting in a wide variety of rolling stock in evidence. Dave's line is a level, double track oval, carefully ballasted throughout with a central operating well, making it easier for drivers to attend to their locos. Dave provided substantial sausages in buns, including fried onions. It was not difficult to return for a second helping! A great day out all round.

Alan Regan

Committee members

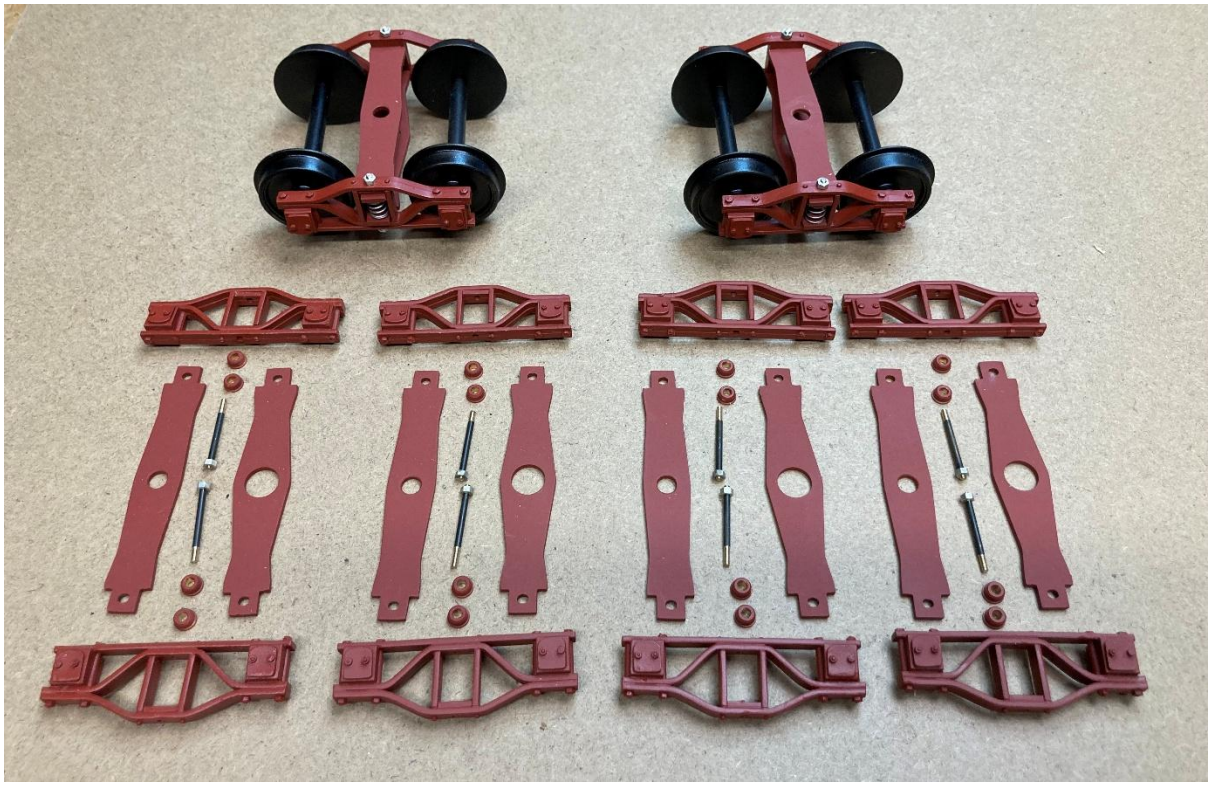
The members of the BAG committee are as follows:

Bob Gamble	Chairman	chairman@bag16mm.org.uk
Garth Bridgwood	Secretary/Treasurer	secretary@bag16mm.org.uk
Mark Cresswell	Membership	membership@bag16mm.org.uk
Ted Robinson	Track Manager	trackmanager@bag16mm.org.uk

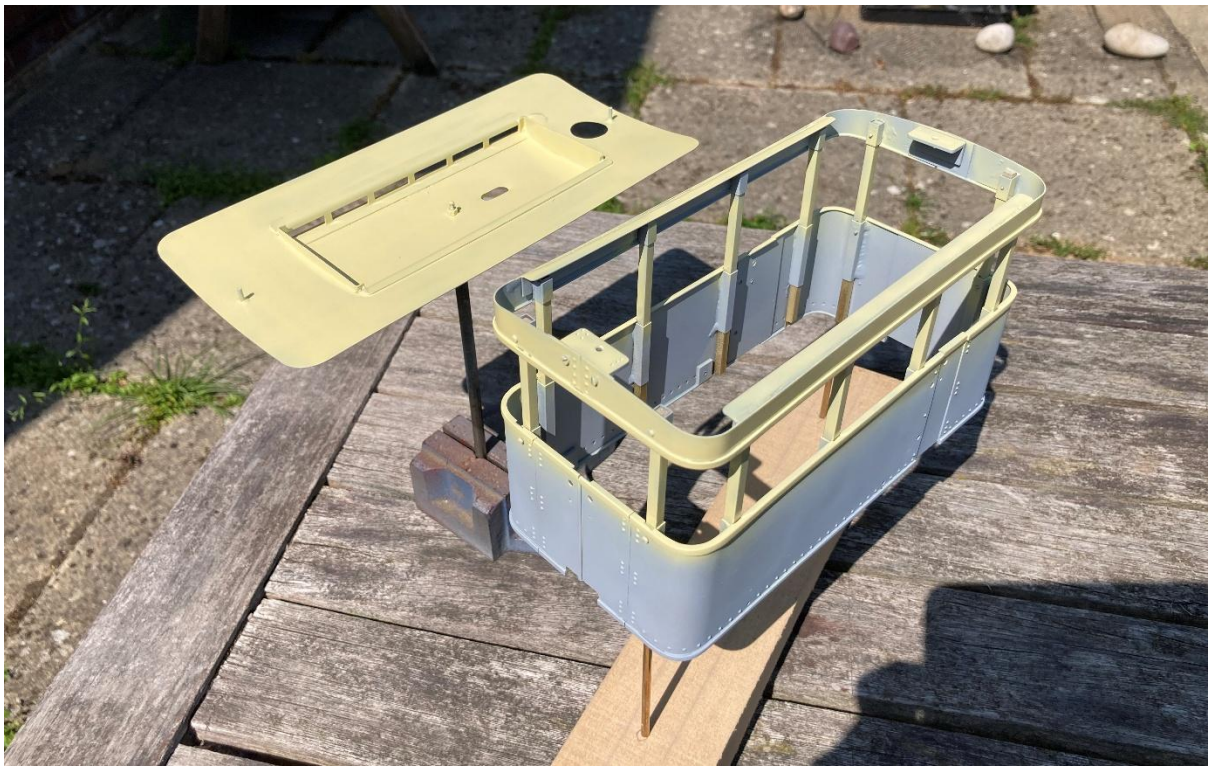
Modelling Matters

THE LOGGING WAGON SAGA

The logging wagon has been a month devoted to cleaning, surface preparation and painting. The "Sprung diamond Frame" Brandbright bogies have a surprising number of components and these were finished in just two ways. The wheels were sprayed with a can of Hammerite satin smooth paint. According to the tin it is self-priming over slight surface rust, not that the wheel sets needed that. The instructions advised 3 - 4 coats which was just as well because coverage was "thin" and it took several days to harden. Looks OK now though. The white metal frames, steel cross members and brass spring cups were all sprayed with Halfords "red oxide". I notice that the Brandbright brochure shows the springs painted in blue and they look very nice, but I left them plain, hoping for slight surface rust to tone them down.



Whilst the weather was not too hot at the start of the month I attempted to spray the cream bits on the tram. Unfortunately the air brush chose that moment to play up, still I got a first coat on in the end.

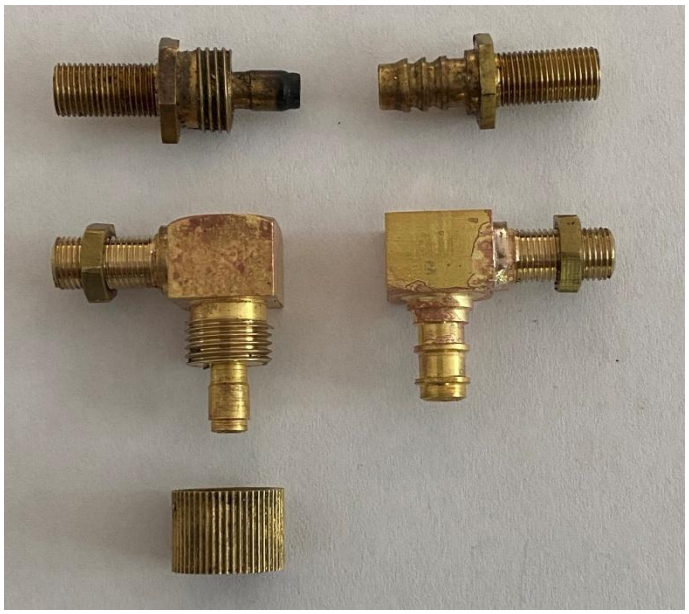


A careful check after spraying showed several blemishes which needed filling and rubbing down which I did with “plastic padding”. I then sprayed a light coat of “Upol 8” self-etching primer over the freshly exposed bodywork. To my surprise I noticed that the primer caused the surrounding cream paint to wrinkly slightly, I will try rubbing down after a thorough drying period and hope it’s not too bad! Another lesson to add to the list, I hope I don’t forget it.

Bob G

MODIFICATIONS TO A GAUGE ONE LOCOMOTIVE

Why of relevance to a 16mm scale audience? The challenges and techniques surrounding the changes to this loco are as applicable in 1/19th scale as they are in 1/32nd scale. There are two main areas that I've tackled so far, close-coupling engine and tender and installing radio control. This picture shows the level of close-coupling achieved and where some of the parts referred to go.



As delivered, the smallest achievable distance between engine and tender is 25mm, which is a yawning gap in 1/32nd scale. The gap is driven mainly by the way that the water supply from the connects to the engine, horizontally into the drawbar. If these connections were vertical, the gap could be halved. For this to occur, the attachment points would need to be L-shaped elbows, with the water pipes looping through 180 degrees back to the tender. The picture to the left shows the new connections. They were made from 8mm square bar, drilled and tapped to take the 5mm connection through the drawbar and to the copper water pipes under the cab floor. The one on the left is water in and the collar traps the flexible pipe to the coupling. The hand pump in the tender is pushing water into the loco, when it's in steam, against 60psi, so this prevents it separating from the connector. The one on the right is water back to the tender, used when the bypass valve is open, so there is no pressure to overcome.

The new connections enabled me to achieve the minimum separation between engine and tender, but the carrier for the gas jets was now closer to the tender bulkhead, which risked constricting the pipe. I needed to reduce this by 10mm, but as this is a twin burner loco, the individual gas jets would need to be in exactly the same place. To achieve this, I made a jig to hold the burners are they were. One of the barrels holding the burner jet was fixed, the other had a little movement and both were held captive with knurled nuts. Once fixed in place, they exactly matched the spacing of the burners in the loco. It was then a simple matter of cutting the copper pipes going in the T-piece connecting the jets, shortening the copper pipes betwixt jets and T-piece and silver soldering it all together.

Here's the jet assembly after soldering and cleaning in diluted citric acid. The picture at the start of this article shows the loco, minus cab, close-coupled with the new jet assembly in place. I also made a new coupling between engine and tender and, as I wanted to retain all original parts, including the post on the tender to which the coupling attaches. I made a new one to provide clearance for planned servo wires. I can't see why anyone would ever want to restore these to the loco, but you never know.

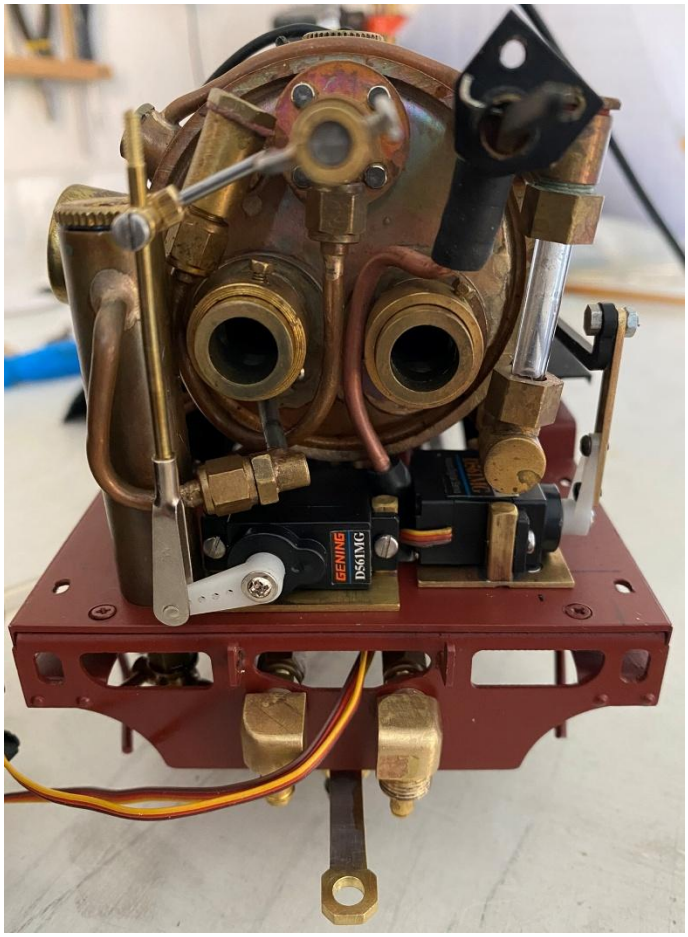
My second job was to fit radio control to the reverser, regulator and whistle. As you see from the picture, there's space in the cab so the servos need not be too close to the boiler. There was room under the tender for a battery 4 x AAA pack and receiver, but no place easily to install a charging point or power switch. There was space in the tender, but this was in the water space, so the electrics would need to be kept clear of the water at its maximum level. The only way I could see to do this was to make a small tank with its bottom in the water space, with all connections safely well above the maximum height of the water. Here's the tank, prior to being soldered up. It was

made in three parts, some parts silver soldered and others held with 3/16th brass rivets or 10BA screws prior to soldering (to ensure that the joints were watertight). This attaches to the inside of the tender bulkhead as show in the next picture. There's just room for a 2.1mm charging socket and a single pole single throw power switch. The 5mm hole behind the power switch carries five wires through the bulkhead in the tender and down underneath.

The space under the tender contains the battery pack and receiver. The Fosworks receiver is of the end-on connector type, so the servo wires won't interfere with the front bogie. The rear three wheels are fixed.

This shows the arrangements inside the tender, looking the same way round. I've fitted a battery condition indicator so that I know at a glance whether I've got enough power for a run. With its substantial gas tank, this loco will run for an hour, so knowing whether you've got enough power to complete the run is important. The gas tank sits in a water bath which also replenishes the loco's boiler via an axle pump on the loco and a hand pump (above the gas tank) in the tender.

The final job was to install the servos and linkages. Each servo needed a bespoke holder which I made from 1.7mm brass plate with 4mm square upstands. I bought the servos some time ago, because they were metal geared, small and had sufficient torque for model loco use, but I can't now find them in stock anywhere. Hitec make similar servos: I'm thinking of the HS81MG, but this is 7mm wider in the body. The regulator and reverser servos were fitted on their backs, to clear other items in the cab. This view is less clear once the whistle servo is installed and the tender is coupled up.



worked perfectly!.

The whistle servo is also mounted on a plate with upstands, but it is very slim, just 8mm, and the operating arm needs to point backwards, out of the cab, because the whistle valve points backwards and cannot readily be relocated. Fixing it to the cab floor was going to be difficult, but there was an option to attach the bracket to the one used for the reverser, to the upstand just below the bottom of the sight glass in the picture to the left. This isn't something we generally have to do in 16mm scale, because we usually have lots of space either in the cab or the side tanks, but as you see, the cab of a Gauge One loco is very cramped and already full of other components. So the new bracket was attached to the upstand with a single countersunk screw and soft soldered to prevent further movement. Once the whistle servo was installed, it masks the installation of the regulator servo, hence the two pictures. Another consideration, which I achieved, was to make sure that each servo can be removed without having either to remove another or to remove any of the mounting plates. Time will tell how these servos cope with the hostile, hot environment of the burner end of a loco, even though there is an air gap between the hot components and the servos.

I can't run this large loco on my own line so tested it on a friend's line last Friday (27th June). It wasn't a happy bunny. One or other of the gas burners kept blowing out and the water supply pipe from the tender was of too flexible a material when hot, so when attempting to pump water against boiler pressure, it expanded and I couldn't get water into the boiler. I have a length of the material originally used so will install that and test again. As to the burners, I suspect a dirt issue (not the jets, they appear to be clear), so the burners will need to come out and be examined. However, the R/C

I appreciate that this isn't a 16mm scale model, but it shows that with a little ingenuity and a lot of effort, radio control can be packed into the most unlikely of spaces. This is the loco, at home and at rest, pending the next set of changes which will hopefully turn it into a Really Useful Engine. It's an Accucraft Deutsche Bundesbahn BR45, a three-cylinder heavy goods loco.

Alan Regan

Sales & Wants

A table will as usual be placed at the back of the hall for members to place any items they have for sale.