

# North Wales Model Engineering Society

West Shore, Llandudno, LL30 2PQ



## NEWSLETTER – MARCH 2026

### GOOD NEWS.

As most of our members know we as a society have fallen foul of the rather complicated planning laws at West Shore as regards our clubhouse and steel containers.

On the 11th of March, Conwy Council Planning Committee discussed the issues, and we have been given five years to improve what we have got now with maybe a permanent building. If any member has a spare 100 grand (or more) and doesn't know what to do with it. Please send it our way.

I don't like saying too much as regards this subject as members of the public can also view my newsletters.

After doing my best to persuade members to attend the planning meeting to represent our society, a grand total of four made the effort. Dave our chairman, Garry, Colin and myself. Dave spoke brilliantly. To speak and put our case forward in exactly three minutes took quite an effort. This was achieved all thanks to Dave, Gary, and Chat GPT. Once again, on behalf of our members, thanks for your great effort.

As regards planning, if you want to see how not to construct a building, please pay a visit to our council's office in Colwyn Bay. Having walked into the entrance foyer, the amount of space wasted hits you. It reminded me of St. Paul's cathedral. The less said the better.

Following the planning meeting we went for a celebratory cuppa to a local cafe. L to R, Gary, Colin, and David, I am behind the camera.



Mike Robertshaw turned up needing some remedial work on his yacht's rudder. I'm not sure if it required a new stainless-steel bolt or a bronze bush to compensate for the wear. As there was so much happening, I couldn't hear the conversation. I had never realised how heavy the rudder was on a boat. Unless you were pretty strong, at our ages it would be a two-man lift.

Mike Brown was busy fixing Peter's lamp, Gary was tweaking the prototype signalling control system, Martin and I were discussing suitable material for my 3 ½ inch LILLA regulator.

Brian was showing a model of the prototype Napier Deltic DP1.



As you can see, the detail on this locomotive is unbelievable, and it's only 00 gauge. I'm reliably informed that this loco has two sound chips. One for the unmistakable sound of the Napier engine and the other gives the sound of flange squeal as it negotiates a curve.



My good friend Brian Haseler is building a 5-inch gauge Castle class loco. This model is being constructed to a really fine scale. Not many of us have a need for 14 BA screws, so when I found some in my workshop, I passed them onto Brian as I knew no other person required them.

This is one of the pins Brian has produced. Showing it to the members, it was really difficult to see the split pin. The thread is 10BA, the split pin was made using the wire found in ties often supplied for tidying up electrical cables or plastic food bags and is 0.016" diameter. Having removed the wire from the tie, it was filed down to half its diameter as near as possible. The hole drilled through the thread was made using one of Owen Francis's drills measuring 0.45mm diameter.



Brian is very lucky to have a friend who is a dab hand with 3D printing working for a company in Wrexham involved with the aero industry. The common link is, he is also constructing a similar Castle class loco.

The Great Western Castles and Kings had four cylinders; both inside cylinders were operated by Walschaerts valve gear.

The photo below shows what Swindon Works designed as a fixture to support the main elements of the valve gear which the works drawing describes as: Cast steel frame stay & valve gear bracket.



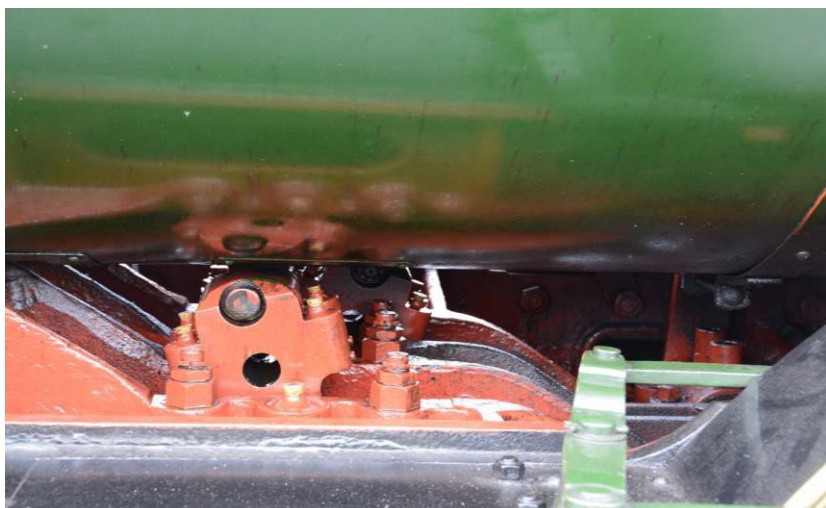
Having produced the electronic plan here in Wales for this specific part, the order was placed for the item to be manufactured in China. From initiation (plus a very reasonable payment) to receiving the completed article manufactured in stainless steel was about 3 weeks. If you look closely, the middle item is made of cast brass and is un-machined. The other two are the Chinese units.

On close inspection, the lower piece has an extra few parts on both sides. These are nothing to do with the original design and will be seen off to be used elsewhere on the locomotive. For an extra few pence, the 3D printer will produce what is actually on the programme. The last photo shows Brian, comparing the slight differences between the two items.



This question was asked by one of the members. If the completed model was presented to a judge at a Model Engineering competition, would he or she deduct points because the model had items produced using 3D printing?

The consensus was they shouldn't, as the skills used to produce the original programme was a skill in its own right.



On the prototype, the pin fits into a bolt which goes into a bolt which goes through the leading wheel crankpin, which in turn secures the boss of the front end of the coupling rod. The works drawing shows the pin diameter to be 3/16" which coincidentally scales down to 0.016" in 5" gauge.



An additional bit of information from Brian.

Just in case this might be of interest to you, here are a few more words, and a photo, of the Valve Gear Bracket. As the drawing suggests, the Valve Gear Bracket was originally made of cast steel. It seems that Swindon did not have the facilities to produce a steel casting and so contracted the manufacture. Around 1937 they decided to make the bracket in-house, possibly in pursuit of greater cost-effectiveness. They broke the design down into separate panels of steel which were cut out from the appropriate thickness then welded together to form the bracket.

The 1937 drawing had the somewhat descriptive title "Side Plate for Built Up Frame Stay & Valve Gear Bracket". It seems the drivers of Castles with the fabricated brackets complained that they did not perform as well as those fitted with the cast steel types. According to one account, it turned out there were problems with some of the welds. At some point, have not yet found out when, Swindon decided to retro-fit those Castles with the fabricated frames to the cast steel type.

Later Castles were possibly built with the original type of frame which is, I think, is confirmed by the attached photo is of 7027, Thornbury Castle, built in 1949. At least it shows what the full size frame looks like, albeit without the fittings.

### **RESPONSE TO MY SIGNAL QUERY LAST MONTH**

Two members, John Davies and Will High, responded to my query regarding why railway colour signals had green and red colours opposite to traffic lights on the road.

There are a few ground mounted signals around; they have the red aspect at the top, as John says to put it closer to the driver's eyeline. The new LED signal heads with only one aperture have to be aligned very carefully, otherwise under particular circumstances the aspect can give a false reading.

Recently there was a SPAD where the signal base had not been torqued up correctly, vibrations from passing trains were sufficient for it to move enough such that one day, when a low sun was in alignment on approach it appeared to the driver as if the signal changed from red to yellow!

Best Wishes Will, Thanks to you both for responding to my query.

### **RHYL MINIATURE RAILWAY.**

Good news that the Rhyl Preservation Trust, operator of the Rhyl Miniature Railway, has purchased Barnes Atlantic No.103 called John from Jim and Helen Shackell. This means all six of the "Barnes Atlantics" designed by Henry Greenly and constructed by Albert Barnes & Co. at the Atlas Works Rhyl for the original miniature railway running round Rhyl's Marine Lake have returned back home to North Wales. Having been sold in 1969, JOHN has travelled quite a bit, including: Alton Towers, The Whorlton Lido Railway, the Lightwater Light Railway and privately owned on the Ravenglass and Eskdale Miniature Railway. It was purchased by Jim and Helen Shacknell in 2007 and was used on their railway, the Evesham Vale Light Railway but has been laid up since 2012.

### **BOILER TESTING.**

All the members have received an email from Martin. Due to unforeseen circumstances, boiler testing will now take place on Wednesday 8<sup>th</sup> April 2026. If you have a boiler in need of a test, please contact Martin for an appointment.

### **EASTER WEEKEND.**

This is the opening weekend of our public Running Season. Gary has sent a message to all members regarding availability to assist with the running. Please make an attempt to help us. I can't guarantee good weather any more as our contact in the Met Office; Carol Kirkwood is retiring tomorrow, I suppose Derek Brockway isn't a bad replacement.

Kind Regards,

*Harold Jones*