

Sussex Miniature Locomotive Society Ltd

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BEECH HURST NEWS



Cover picture: -

Heavy Freight. After a recent overhaul by Mike P, Ray's former '01' 'Martlet' now looks resplendent in its refreshed BR black colour scheme. It is pictured here last Saturday during our special double-heading day leading Brian J's tank version of the same LNER class.

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Editor's Notes

As I sit and write these notes it is the first day of Meteorological Autumn and despite the pleasant sunshine, the cooler days / nights are starting to hint at the end of summer. With this brings the mass exodus back to school and back to work after the summer holidays, and for us at Beech Hurst the start of our last month of operation. July was good but August has been mixed, particularly the last (Bank Holiday) weekend with only the Sunday being 'pleasant'! That said, when you operate 3 days out of 7 during a month, even in the summer, the law of average says that some of those days will be so-so! September however has been good in the past, so we can but hope for a nice end to our operating year. Alongside several other items in this edition, there is an article by Roy Preston about proposals for a 'Railway' / 'Training' Centre at Beech Hurst. Although this is not directly linked to SMLS as such, the proposals will hopefully spawn suggestions from SMLS members that are key to taking this project forward. Change can often be a dirty word, however the future of the Club as we know it is in our hands and failure to attract new (and preferably younger) members now will ultimately mean forced changes in the not too distant future. In my opinion it is better to have tried something like this now than to look back with hindsight in years to come and wonder what might have been. The same forethought also needs to be applied when looking at who might take on certain roles within the Club in the future. This equally applies to administrative as well as maintenance tasks and without the need for any single member to do too much themselves. Roy's approach in trying to create an environment where new members may well be attracted to join SMLS should therefore be applauded. His article, next but one, will elaborate much further...

In addition to Roy's piece, there is also an article in this edition from Josh about the construction of his 3 stationary engines and the conclusion to my 2-parter about model vacuum brake valves. I will also report on a couple of BBQ's / Social's that have occurred since the last edition, as well as providing an updated Diary through to New Year's Day 2016, so please read on and enjoy...

Andrew

Chairman's Notes

One month of the 2015 running season left! Where did the summer go? Actually, it didn't seem to be a very good summer weather-wise this year, yet we have done quite well with fares and passenger numbers. Perhaps it wasn't beach weather... and Wednesdays were better than last year... except for the last one which was washed out! Summer such as it was has rapidly gone downhill, but up 'til recently we have dodged the wet days. Let's hope September improves.

As anyone who attended the last AGM knows, Roy Preston has been working on an idea to create a new 'Railway Centre' (building) to run alongside our Club facilities (although with no connection to it) to encourage youngsters in railway matters. Roy has produced an article for this newsletter. To that end, Roy, Mike Wakeling and I met up with some members of the Council to investigate, and discuss, the feasibility of such a building. I will leave Roy to describe the results.

However, despite not hearing all that we wished on this matter, we did in fact learn much about our current status, relating to our lease and future site plans.

As you may or may not know, our current lease has a handful of years left to run and the matter of future renewal has already been broached at an AGM. It would appear that the standard council lease is 28 years and so we might hope to renew in the future on this basis.

The land to the rear of the clubhouse is not part of the charitable trust, unlike the main park. It belongs to the Council, as does the Council 'compound' to the south of the park near the nursing home.

It appears the Council (councils everywhere) are being 'encouraged' to do something with 'surplus' land, and it seems quite likely that the compound will go and housing will be developed on this site..., access to the back field via the gate from the compound (over the long tunnel) may be lost. They are also considering what to do with the back field (around and under which our railway runs).

It was made clear to us, in a polite but firm way that it behaves us to 'play ball' with them over this area. They could if they wished, sell it off and kick us out in extreme circumstances we were informed! However, this is not their wish. It seems they would prefer to develop some interesting area there for the public to visit. I pointed out that we were mainly concerned with the safety aspect around the track, tunnel and our storage and siding area. Fencing, disabled access and ideas for the area were mentioned with the possibility of this field being effectively donated to the park and becoming charitable trust land.

I suspect a lot of this will be a way off, but it might well coincide with our lease renewal. When the time comes to renew, we will also require a good solicitor, polite and competent to oversee the matter with the Council.

Up until now, we have had the back field to ourselves, but you must be prepared to accept some change there I think. We have a good relationship with the Council and our public, and it would appear that the present track layout can survive the changes if we work alongside the Council and their legal / landscaping teams. To resist 'progress' in this area might well jeopardise half the track! It should be possible, if or when these changes come, to find a way to keep the railway operation safe and have access for the public. A new access point to the back field was hinted, with our current footbridge retained by us and 'gated'.

It appears nothing has been formalised yet regarding any of this but 'watch this space'! We are involved in regular meetings with the park 'steering group', so we will keep our ears to the ground. 'No smoke without fire' they say and I think change will come eventually.

For now, enjoy the end of the season and September's running days

Mike

'Speed'

With just a couple of weeks left of the 2015 season, a quick and polite reminder to all drivers to please keep your speed down when passing by the clubhouse and steaming bay areas due to the lack of visibility and risk of finding yourself bearing down on an unsuspecting stranger straddling the railway!

Committee

Introducing the 'Beech Hurst Miniature Railway Centre' OR 'A Vision of the Future'

As I said at this year's AGM, Mike Wakeling and I submitted an outline proposal in November 2014 to seek approval to build a 'Beech Hurst Miniature Railway Centre'. In July, the Trustees of Beech Hurst formally agreed to explore the establishment of the 'Centre'. On 27th August 2015, Mike W, Mike P and I met with Council officials to find out how the project can be taken forward. It was a challenging meeting with three main issues that we need to deal with upfront.

The first is that our plan was to set up a Charitable Trust in order to allow fund raising. We were then told that the only allowable route would be to set up a 'Charitable Incorporated Organisation' (CIO), and probably one referred to as a 'Foundation CIO'. This sounded ok but the problem is that in such a case the Trustees may bear full liability. We were advised that, in order to ensure adequate Trustee protection, we would need to engage a lawyer or solicitor at the outset to navigate a safe route, a process that would be costly.

The second issue was that it would be essential that we could prove to the Beech Hurst Trustees that for many years, and at least over the term of a lease that might be a minimum of 28 years, the running costs would be covered. Whilst this would be possible for some years in the future, it seems impossible to provide such a long-term guarantee. Furthermore, we would have to show that even longer term rebuilding or potential demolition costs could be covered.

A third issue is the need to appoint a Construction Design and Management adviser in order to address likely Health & Safety issues. With the proposed building being in public gardens this may pose real problems, especially related to access for the proposed site.

So, to progress the project we need to address these issues. I have already received positive responses from a number of SMLS members and a few avenues are being explored. However, if you know of a lawyer or solicitor who would be willing to help and advise us, maybe the first two issues could be addressed. Alternatively, if we can raise enough upfront funds we should be able to employ a lawyer / solicitor. So, please let me know if you know a lawyer or solicitor who would be prepared to help. There would also be other upfront costs that will be incurred before we can get final project approval, maybe £5k will be needed. If we are to continue with the project, we will need to raise this sort of level of funds. Please let me know if, when the time comes, you would be prepared to contribute to this fund. Personally, I am prepared to help financially.

The ultimate decision as to whether we pursue the project will depend at least in part on responses I receive to the above requests.

Nevertheless, considering a lot of work and preparation has been put into the project, I thought it is now appropriate to share some of our ideas with SMLS members. The rest of this article should be considered purely as outlining our ideas about the facility and should not be considered in any way as being finalised, as various aspects will probably change.

Proposal

The proposal, as submitted to the Council, was to build a 'Miniature Railway Centre' in Beech Hurst Gardens to provide a stimulating environment in which we can demonstrate and train both young / old the principles and skills needed to build, operate and run a miniature locomotive in a safe environment. The 'Centre' would also inform the public about the history of the Railway and the Gardens. The facility would operate and be financially completely separate from SMLS.

Aim

The aim would be to establish a 'Learning Centre' that would, in partnership with other individuals, industry, local schools, colleges, clubs and societies, raise the profile of engineering, sciences and electronics as an exciting and rewarding hobby or profession for all to be involved in. As outlined later, a key outcome of the project would be to provide a continuous source of new members to SMLS, thereby ensuring the heritage of operating steam locomotives at Beech Hurst.

An alternative

Having outlined above the proposal and the aims, it is clear that the primary benefit for SMLS would be to secure a long-term supply of talented youngsters who would ensure the heritage of operating and running steam locomotives at Beech Hurst well into the future. More information about the specific proposals is given in the rest of this article.

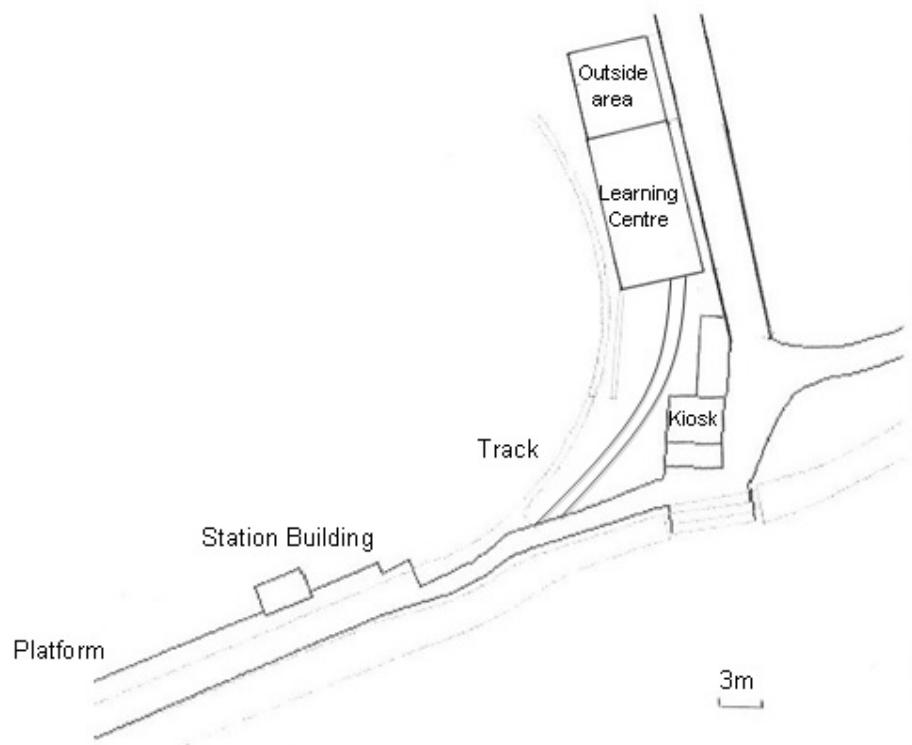
Whether a new 'Centre' as proposed here is ever realised remains to be seen. However, if you feel there is not only a better way of ensuring the long-term future of steam at Beech Hurst and, furthermore, you are prepared to lead and drive an alternative proposal forward, please let us know.

The building

The proposed building would be approximately 11 m by 6 m external dimensions and be of traditional brick construction with tiled roof in a style consistent with Victorian architecture, the initial design idea being shown below (**picture next page top**). Inside, there would be display and demonstration areas. An outside area would be available for display and seating. This design is our current idea but would certainly change in response to Council requirements. Council officials have already made some interesting suggestions.

Location

The proposed 'Centre' building would be built on land between the railway and the path north of the 'Kiosk', as shown below (**picture next page bottom**). It would replace existing bushes in the 'jungle'. The building would come to within about 1 m of both the track and the path. In the view shown, the track would be behind the 'Centre' with a retaining wall. A new path might lead from the main path near the signal and pass between the back corner of the 'Kiosk' and the track. This location, which was suggested by Council officials, is ideal being on the path of passengers going to both the 'Kiosk' and our station. However, it is conceivable that even the location might change.



Convenience of the location

As the 'Centre' would be next to the 'Kiosk' it should be attractive for parents with children to buy refreshments at the 'Kiosk' and consume them whilst seated in the outside display area, or maybe even in the 'Centre' while their children explore and enjoy the displays.

What would go on in the 'Centre'?

The aim is that the 'Centre' would be open during public running periods and also at other times for special events, such as training courses etc. The intention is to encourage active, passive and interactive displays that could range from simple models brought in for the day to more detailed static and interactive displays showing how things work. It will be important to have displays that are not only exciting but also aimed at education. Young people would ultimately man these and it is fully expected that contacts would be built up with local schools, colleges and other associations that would lead to new people being involved and new ideas for displays and activities. Also published in this newsletter is a small article by Joshua van den Dolder on his oscillating steam engine and hot air engines. These are the sorts of active display that we would wish to encourage. I am sure these would interest many of our passengers of all ages.

Main outcome of the 'Centre'

The 'Centre' would provide the opportunity for youngsters to learn gradually and to appreciate a miniature railway. Once they are aged 12 and over they may then wish to become a member of SMLS. They would then embark on a series of tasks under strict supervision. They would be able to learn how to undertake a lot of small maintenance tasks and accumulate 'credits'. These tasks would cover a number of different areas. For instance, some track-related tasks would be regular checking for broken fishplates, bonding wires and split sleepers. Also, operating the track monitoring vehicle, analysing the results and ultimately using the data to make improvements. Similar sets of tasks would be formulated for other areas such as station operation, keeping records, locomotive and carriage preparation, gardening, truck maintenance etc. etc. Those that would have already gained experience and appropriate competencies would supervise the younger ones thereby reducing the time demands on more senior SMLS staff. If five or more new members were achieved each year and considering that by the time they reach the age of 20 many would be lost to college and university, hopefully pursuing a scientific / technical career after being enthused by our training, maybe one might stay on and become a valuable and in the future essential member of SMLS enabling the heritage of steam locomotives at Beech Hurst to be maintained long into the future.

Driver training courses

It is fairly evident that as time passes there will be fewer SMLS members able to drive steam locomotives. In the long term, it is hoped that driver-training courses would help to offset this growing problem. So, during summer months the plan would be to have driver-training courses established.

Probably a two-afternoon course would be set up involving the students learning about steam locomotives and how to operate them, and also learning about the railway and how it works. Finally, there would be the opportunity to drive a locomotive, obviously not during public running.

Historical displays

Space would be made available for historical display of material associated with both the Gardens and the miniature railway.

Other uses for the 'Centre'

As noted later, the 'Centre' would have to be self-funding. To achieve this, opportunities would be taken to find other groups and associations who might like to hire the facility for meetings and even for parties organised by the 'Kiosk' staff.

Timescales

Timescales are dependent on two major factors. The first is fulfilling the requirements and further approvals processes determined by the Council, and the second is the need to raise the necessary funds to build the facility. The first of these is very much an unknown timescale, but if final approval were to be gained, it is unlikely that the facility would be completed in less than three years from the date of the final approval.

Support and funding

Once final approval has been gained, considerable support would be needed both to raise funds and to operate the facility once completed. It is hoped that initial media coverage and promotion of the project would attract interest and active support. Seeking continuing external support would also be essential once the facility is completed. Nevertheless, raising funds to build the facility would not be easy. It is estimated that the costs would possibly be up to £150k. As already mentioned, to ensure we could bid into different funding bodies, the plan was to set up a separate charity for the project, a plan that would also help gain support to cover running costs once the facility is established.

Some ideas for support and fund raising would be:

- a. Application to numerous funding bodies.
- b. Raising interest with local schools and colleges.
- c. Asking for contributions in various forms from SMLS members.
- d. Asking the public for support and donations through advertisement, social and other media coverage.
- e. Building a scale model of the new facility and seeking an arrangement with local shops to have it in their foyer, maybe with a locomotive and staffed by the young mainly during the winter months.
- f. During the running season, displaying the scale model at the station to seek support, donations and sponsors.
- g. Seeking sponsors by direct approach.
- h. Holding special fund raising events in aid of the project.

Contributions by SMLS members are mentioned above. Clearly, this is a major project and any help that SMLS members could give would be greatly appreciated. Help would be needed on a number of fronts but one of the most important being fund raising through various activities. These would include promoting the project, manning display stands, raising awareness through social media, etc...

I have already obtained the voluntary services of an architect for initial planning work and also the agreement of a major building supplier to provide all materials at greatly discounted prices, so that is a start.

In conclusion

There is much more that could be said about the project and our ideas. Having now heard from Council officials about the mainly legal issues associated with taking the project forward, the only way we could pursue this project is with the active advice and input of a lawyer or solicitor involving upfront costs of maybe £5k, a figure that also includes other up-front costs. Even then it will be a challenge to provide the long-term proof of economic viability that the Council needs, but we may find a solution to this issue. If SMLS members can help as outlined earlier, or are prepared to contribute to a fund to raise the £5k, we may still be able to further develop the project with the Council. It is therefore up to SMLS members as to whether what has been outlined above is a 'Vision of the Future', or just a distant dream.

If you are prepared to contribute, or have suggestions for a legal person who might advise us, or have any comments please let me know at royc.preston@btinternet.com or phone on 01403 263428.

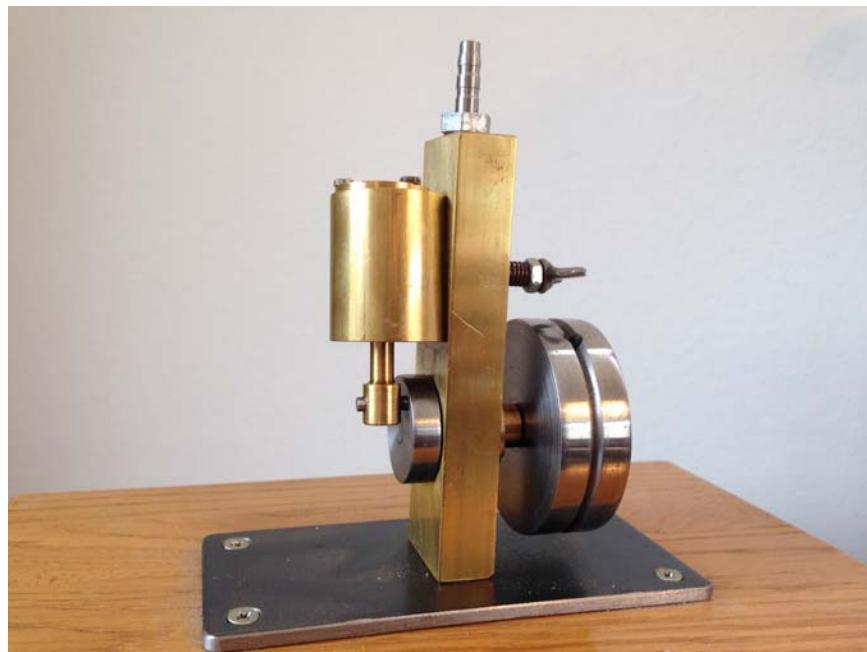
Model Stationary Engines

Hello my name is Josh and I'm 15 years old. I've loved engineering for as long as I can remember. My Granddad always said I preferred mechanical components to toys. As I grew up I enjoyed most of the usual construction toys especially Lego Technic and Knex. I loved adding motors to my models to make them move. More recently I've found that YouTube is a good source of information. I can find ideas and not be limited to kits that you can buy in the shops.

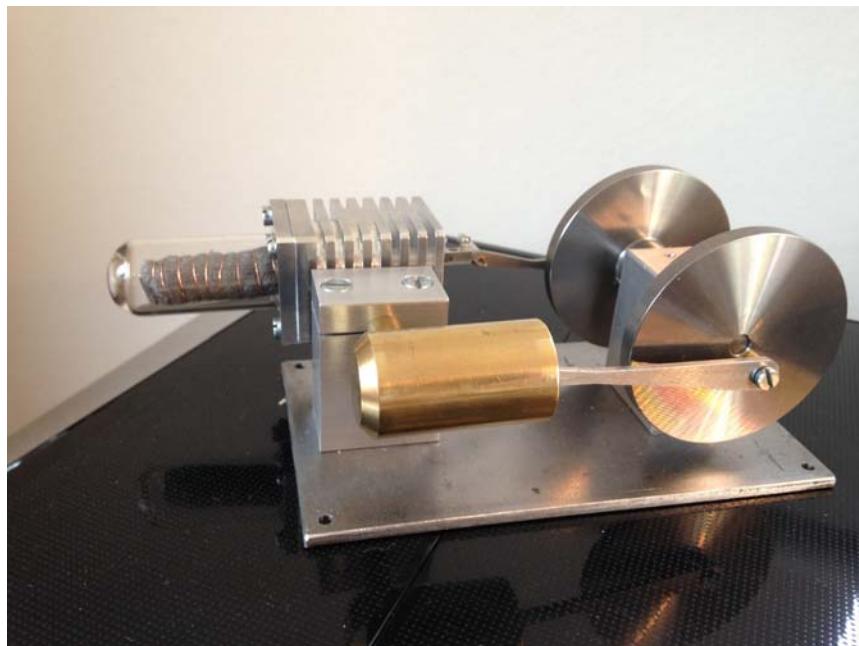
When I was 12, I found a Stirling engine on YouTube that was made with Coke cans. I thought it would be fun to make one. There were no instructions so I would have to figure out how to make one. I lived in South Africa at the time so I only had access to a small hardware store. I used 3 Coke cans, a balloon, some wire, fishing line, wire wool, some screws and a tea light to power it. It took a lot of trial and error to get it working because the silicone seal kept leaking round the working piston but eventually I got it going. I felt a great sense of achievement when it started running (**picture next page top**) and emailed films of it to engineers in my family and posted it online.



A year later I was given the opportunity to build a steam engine in the workshop of one of my Granddads friends. This project took me all summer to complete. I went online to find some plans for a steam engine and spent a day each week making it while adding a few modifications of my own such as an oil tank. For the engine I used brass and steel, and for the base I used wood. The machines I used were a lathe, a milling machine, a pillar drill and a variety of hand tools. After a lot of hard work, it was time to test the engine using compressed air. It felt really good when the engine was working because this was my first proper metal work project and the engine was built entirely from scratch (**picture below**).



Last year, I went to Bristol model exhibition and my Great Uncle bought me a Stirling engine kit. I thought it would be fun to learn new skills and use old skills I've previously learnt. The kit contained the cylinders and fly wheels all partly done, and a few bits of metal which had to be made into various components. As a member of Beech Hurst railway I've been able to use the club workshop. Roy P has shown me the skills to build the engine and has overseen my building it, checking the measurements to make sure I don't make any mistakes. The engine is now nearly done (**picture below**) but due to a mistake in the drawings I have to remake the piston rod.



I am looking forward to moving on to making the ME Beam Engine which will be contributing to my Silver Duke of Edinburgh Award.

Josh

Recent Social Events

Following on from the June edition, there were no planned events due to take place until the August Bank Holiday weekend; however an impromptu extra BBQ was held on Thursday 6th August, tied in with our Club Night and a match against the Pentanque Club. 10 SMLS members paired up with 10 Pentanque Club members to play on 5 separate pistes with varying degrees of success, although we were not totally outclassed and if anything results were more favourable the longer the evening went on! Having started just after 18:00, by the time 19:30 came round we were all getting hungry and went back to the clubhouse for the BBQ, which had been prepared by those not playing Pentanque. Thereafter, we all enjoyed a couple of hours of food and conversation with our friends from 'across the way' and it was a very pleasant evening – dry too if a little bit chilly!

Thanks must go to Mike & Lorema Wakeling for organising this evening and for providing all the salads to go with our BBQ'd meat! Thanks also to all the other Pentanque and SMLS members who attended to make it a very successful evening and one which we can hopefully replicate at some point during 2016. (**Picture bottom:** After Pentanque, there was time to chat & relax at the BBQ).

The Bank Holiday Saturday then brought two events in one day. During the afternoon there was a small charity 'do' at Beech Hurst arranged by local hospice St Peter St James, which involved us and a small number of stalls to promote awareness and funds for their excellent work. Our service started at 13:30 and comprised of 3 double-headed trains, 2 steam and 1 electric. The weather, although dry to start with, was forecast to get wet by mid / late afternoon and if necessary we had planned for an earlier than 17:00 finish. As it turned out the rain did not materialise to any great extent and we had a pretty reasonable afternoon with a good number of passengers too. As afternoon merged into the evening, so we set about preparing for our second BBQ of the year. A plastic sheet had been erected from the back workshop wall earlier in the day to protect against the forecast rain and as the railway was put to bed, so the BBQ was brought out and lit up in readiness for the evening! As the smell of frying onions emanated from the kitchen and smoke gently billowed out from under the plastic sheet, so it was time to un-wrap our goodies and get cooking! Due to the busy afternoon and partly inclement weather, there were no trains running this time, however there was plenty of conversation to be had and people chatted as they ate or huddled round the BBQ out of the rain. Although not perfect in terms of the weather it was another very successful evening, attended by over 20 members and family, and thanks go to all those who made it so. Also thanks of course to Val & John for much of the food preparation and everyone else who helped to prepare and then clear away afterwards, which often goes unnoticed! As Val said when we spoke earlier in day, we hardly seem to get two BBQ's in a year that are both excellent in terms of weather and 2015 proved so again. That said, let's hope that 2016 is better and we get lucky in this regard. (**For pictures from Double-Heading and BBQ, please see the following 'Pictorial Interlude'.**)





Picture Top: John B with his GWR 'King' and John R with his 'Britannia' double-heading
Picture Middle: Graham with his 'Class 33' and Stephen with his '4-CEP' are paired up
Picture Bottom: Tom driving Mike's '01' and Steve S driving Brian J's '01' also together



Picture Top: A short while after ignition and smoke is still billowing out under the sheet
Picture Middle: Stephen, Graham and Norman guarding the puddings
Picture Bottom: A busy scene with the BBQ in full swing and with the rain having let off

Locomotive Vacuum Brake Valves – Part 2 of 2

Following on from my previous article in the June edition, part 2 concludes with a look at some more model variants of the vacuum brake valve from two of the leading manufacturers of their day, starting with Davies & Metcalfe.

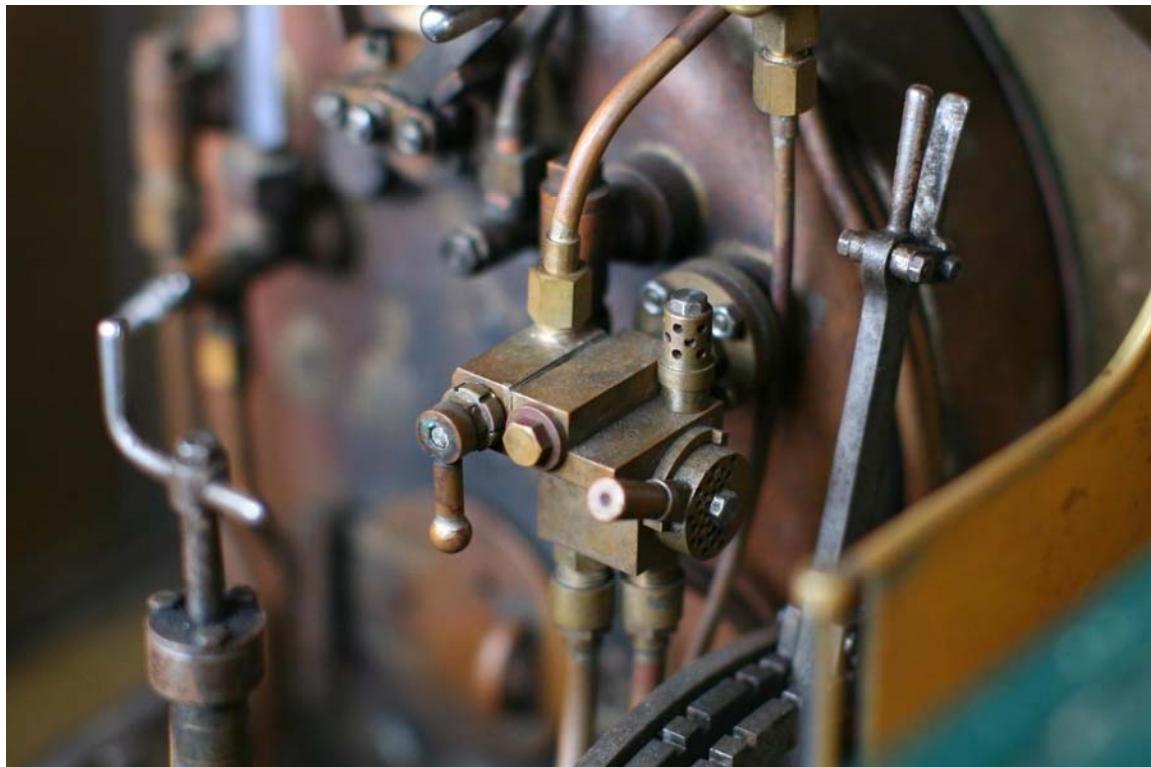
Unlike the vast majority of Southern Region locomotives, the Bulleid designed Battle of Britain, Merchant Navy and West Country classes had Davies & Metcalfe combination vacuum brake valves fitted, as did many LNER locos too (**picture below**: The valve on Howard Strongitharm's 'Merchant Navy' loco).

Unlike the GWR and LMS valves described in my previous article, the Davies & Metcalfe unit has an up / down actuation on the brake handle, rather than a side-to-side one. Whether this was more comfortable for drivers I cannot say but it does mean the handle stays more within reach along its travel. The one on Howard's loco is a simplified version of the full-size but does have the unusual trait in 5" scale that it is a true combination valve, applying vacuum to the tender / train brakes, at the same time as proportionally applying steam to the locomotive brakes. The only part missing on the model from the full-size version is a separate valve that you can independently apply steam to the locomotive brakes without the use of the combining vacuum valve. This would normally be used when running light engine and brake force from the vacuum on the tender is not required under standard braking conditions. As stated above, LNER engines of the period were also commonly fitted with Davies & Metcalfe units, albeit to a slightly different design but in principal the same actuation. Both Davies & Metcalfe and Gresham & Craven, who I shall move onto next, had large manufacturing sites in Manchester, at Romiley and Salford respectively.

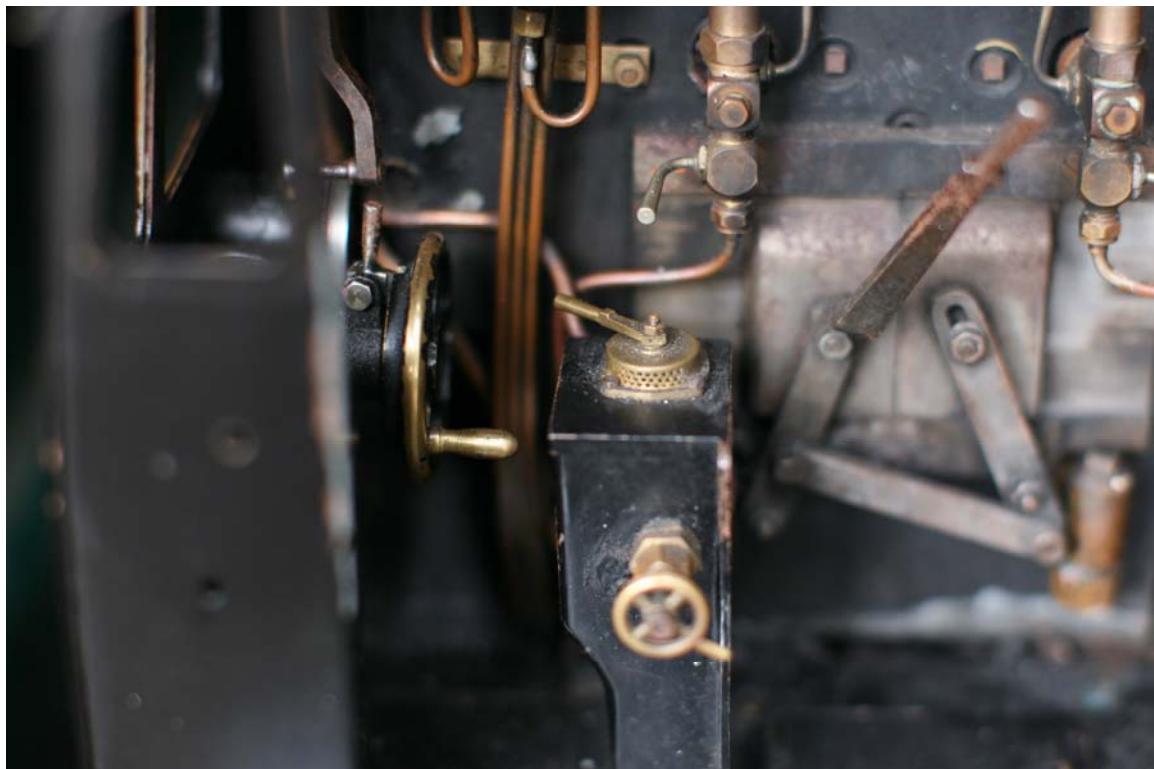


Gresham & Craven were the manufacturing arm of The Vacuum Brake Company and during their time Gresham's made a number of different variants of the vacuum brake valve, the most common 3 I shall describe below.

First off is their patented 'Dreadnought' style valve (**picture below**: The valve on my Railmotor locomotive). These were common on locomotives around the turn of the 19th into the 20th century and continued in regular use until the 1960's. The 'Dreadnought' design featured a valve mounted to the side of the main block and actuated in an up / down motion. The operating handle itself is held captive within a quadrant, vertically positioned meaning the brake is released or nearly horizontal (**as pictured**) meaning the brake is fully applied. Although not present on the model, the full-size version also has a sprung 'trigger' valve mounted behind the main handle to allow for small brake applications to be made without actually moving the handle itself. The full-size valve also features 2 exhaust jets, one big and one small depending how quickly the brake needs to be released. The model only has one and is sited behind the hexagonal nut on the front face. Steam is applied to the ejector by means of the ball ended valve handle to the left of the main block. Without too much difficulty the ejector will raise upwards of 10 inches of vacuum, even at 30psi feed pressure and the brake valve has a nice graduated action too. Water usage on such a small loco is quite high though and to run with the ejector operating is less than easy! The model is only a good representation and requires finishing off to make it look more like a casting and less 'blocky'! Examples of the 'Dreadnought' can be seen at the Bluebell Railway, for example on the SECR 'C' class which has a straight vacuum brake valve or on the LBSCR 'E4' class, which features a combined vacuum / air brake valve or on the SR 'U' class which features a combined vacuum / steam brake valve.

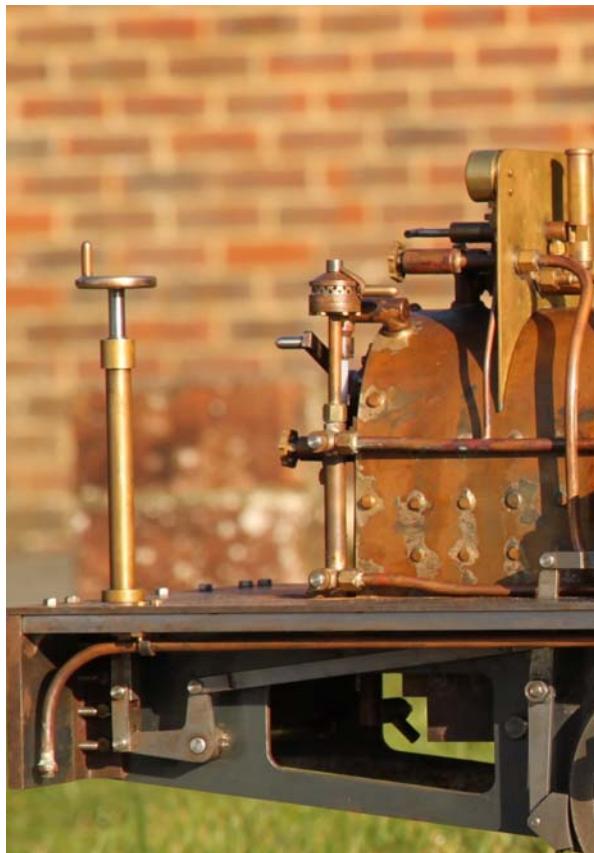


The second example I shall look at is the 'BR Standard' type vacuum brake valve (**picture below**: The valve on Howard's Standard '5' locomotive 'Camelot'). Developed after the 'Dreadnought', the first obvious difference is that the valve and handle are horizontally mounted rather than vertically / side mounted. Fitted to the top of the driver's pedestal I am guessing they would have been less easy to operate but depending whether the driver was seated or standing. The handle (**as pictured**) is in the vacuum brake released position and to apply the brakes the driver would gradually bring the handle away from the boiler depending how quickly he needed to apply them. As far as I know all BR Standard's featured a combined vacuum / steam brake valve, thus as the driver applied the vacuum brake to the train so the steam brake to the loco was proportionally applied too. Although not present on 'Camelot', the steam brake part of this valve was above the pedestal, mounted off the backhead of the boiler. When the locomotive is operating alone the separate steam brake valve is used to apply the brakes to the loco / tender rather than using the vacuum brake handle on the pedestal. The handles to operate the 2 exhaust ejectors are then directly in front of the driver inside the spectacle plate. Unlike the 'Dreadnought' valve, which has the ejector cones internally mounted within the main block, this later 'BR Standard' type has a separate ejector mounted outside the cab on the smokebox side. Examples of this type of valve can be found on all the 'BR Standard' locomotives at the Bluebell Railway, as well as on 'Austin I', which used to be at the Lavender Line and which has been driven by many of our members over the years!



Third and finally is the later Gresham & Craven vacuum brake valve, another development from the 'BR Standard' one above. This particular design is not common on steam locomotives, in fact I know of only one it is fitted to and that is on 'Dougal', a former gas works 'Welshpool & Llanfair' narrow gauge locomotive. (Pictures below: The valve on Andrew S' 5" gauge model of 'W&L' 'Dougal'). The full-size 'Dougal' (all 2ft 6in of it) was not built with anything other than a hand brake and as such this vacuum brake valve has been retrospectively fitted. Although I cannot be sure about a design date for this style of valve, I am pretty certain it was post-war mid-1950's and was fitted to some diesel locomotives and to almost all first-generation Diesel Mechanical Units. Like the 'BR Standard' type before it, this valve is horizontally mounted with a rotary actuation. Apart from the subtle shape differences these valves also featured a 'lap' position which was half way between full release and full apply. The 'lap' allowed for a certain brake application to be made and then held before increasing or decreasing as necessary. This was different to all previous designs that worked by balancing the amount of air the brake valve leaked into the train pipe, against the amount of air the ejector could exhaust. For those of you old enough to remember the first-generation DMU's (even I do), those you could see out of the front if the driver put the blind up, you may well remember the unique noise these valves made as the brakes were applied. It was quite noisy and noticeable in the passenger saloon! The model valve is simplified in that it does not have a 'lap' position but operates by way of a lifting ball valve – it does work well and looks good too!

(Picture left: The valve prior to fitting (and right) mounted on the locomotive).



And that pretty much concludes my article. Although vacuum is not widely used on 5" gauge models, I think it is still an interesting area to explore and because even the smallest 5" gauge model is capable of running an ejector it is quite good fun too. True it makes you (and the loco) work harder but hey that's the challenge! Over and above just running with my 'Dreadnought' valve I have been conducting a couple of experiments recently to see if I can work out the rate of exhaust a no.74 ejector cone will produce. I have the figures at home for a full-size 'Dreadnought' ejector, so it will be interesting to see if there is any correlation between the model and the full-size. I will report back with my findings...

Andrew

Forthcoming Events

With the bulk of the summer season now over, there is a limited Diary to take us through to the New Year. 3 more Saturday events take place in September as detailed below and then we have agreed dates for Bonfire Night and New Year's Day too. Names for both of these events will be required to ensure adequate catering and lists will be put up on the board in October (for Bonfire Night) and November (for New Year's Day). Please add your name to each list if you wish to attend and be fed! Also, for Bonfire Night, fuel for the fire will be most welcome from October onwards, most combustibles are accepted (no tyres or too much plastic though please!).

You will notice the absence of the Sandown Park exhibition in 2015, which has been curtailed and no substitute event has been forthcoming. We are told a new format is being planned for 2016, so watch this space. Alexandra Palace (mid-January) and Brighton (mid-February) are confirmed however and details will appear in the October edition...

Andrew

Diary of Events

12th September 2015 – Maidstone Club to visit Beech Hurst – From approx. 1000

19th September 2015 – ‘Saturday Direction’ – Normal 1400 to 1700 service

26th September 2015 – ‘Goods Train in Operation’ – Normal 1400 to 1700 service

7th November 2015 – Bonfire Night – Will start at approx. 1800

1st January 2016 – New Year’s Day Fun Run & Lunch – Will start at approx. 1000

NB. Certain events may be organised at short notice and will not therefore appear in the newsletter. Please check black / notice boards in the clubhouse for details of such events.

Andrew

Sussex Miniature Locomotive Society Ltd



Rear Cover picture: -

I'm Watching You: Earlier in the summer a lady friend of Dan's came up to the Club and brought along 'Florence' the Owl! Apparently 'Florence' was well received by the unsuspecting travelling public and is pictured in front of 'Wharfedale' whilst perched on the engine shed road.