

BEECH HURST NEWS



Cover picture: -

Up and Running: After many months of work, on and off, Hamish's 'Juliet' locomotive is now back on track after a minor overhaul to help seal a number of steam leaks at the 'business (front) end' of the locomotive. He is now on the road to learning to drive his first locomotive...

Editor

Andrew Brock
189 The Welkin
Lindfield
RH16 2PW

andy.brock15@btinternet.com

SMLS Ltd, The Clubhouse, Bolnore Road, Haywards Heath,
West Sussex, RH16 4BX.

Opinions expressed in the News are not necessarily those of the Society for which it cannot be held responsible

Copyright is that of the author or the S.M.L.S

Editor's Notes

As I write these pages, it is mid-summer day and already our 2010 season is passing us by at break neck speed. Soon we will be in July and the summer part of our season will just fly by as the service intensifies into August. It is however just starting to warm up nicely but we haven't had much in the way of tangible rainfall for sometime now and I fear that July, as it often is, will be wet!

I would like to thank Nick for his article in the April edition and following on from that I have articles from Adam and Andrew S for this edition as the junior work theme continues. Along with those pieces there will also be write-ups about all the latest visits to / from Beech Hurst, the 60th anniversary 'guest form', all the usual articles, an updated Diary of Events, along with many pictures, thanks to Andrew S, from around the club and our recent visits too, so please read on and enjoy...

Chairman's Notes

We have reached mid-season already! So far everything has gone very smoothly, although the weather has been mixed at the weekends, but fares are holding up well. We have recently had visits from Chelmsford and Lavender Line, and have visited both in the last few weeks too. I must say I enjoyed my first visit to Isfield (Lavender Line) this year very much and thanks to all the members there for the friendly welcome we received.

Bookings for our 60th 'Golden Arrow' trip at the Bluebell next year continue to trickle in. Another form is available in this newsletter for booked members to reserve a further place for one guest each. After that we will review the situation and see if there are any last places available for extra 'paying guests'.

Enjoy the second half of the running season...

Mike

The Youngsters... A 'Sweet Pea'

Having joined the world of model engineers when I was only 8 at my local club in Crowborough I spent my first day cleaning track with rags covered in white spirit and gloves to keep me clean which did just, well just the opposite of that. I then ended the day with a few laps on one of the members lovely "Sweet Pea's" and at that moment I had no idea that the first ever engine I would build was going to be a 'Sweet Pea'.

In 2007 after working on some of my Grandfathers old locomotives, we purchased the frames for the 0-4-2 version of the 'Pea' with the horns, axle boxes and wheels already machined. After many hours working on it over the last 3 years whilst juggling my GCSE's and A-levels, and playing in various hockey teams in Crowborough, I have produced the majority of the parts to get the chassis well on its way to being complete. Luckily my Dad bought all the castings many years back and taking inspiration from "Nobby's" loco boiler for a 'Sweet Pea' and seeing the benefits of it my Grandfather had Cheddar produce our boiler back in 1992.

Having a good base to start with, my main aim was to produce a rolling chassis. This was done within the first few months and in spare time I had I produced the footplate and many other odd little parts. Whilst I was doing this, Dad took on the task of making all the brake gear when he had the odd evening free. Making changes to the design to make it simpler to manufacture he produced some lovely parts and it didn't take him long to finish the majority of the brakes, only leaving him with the brake shoes now left to do. The 'Sweet Pea' has Hackworth valve gear and knowing that this has to be extremely accurate to make it work well many of the parts I made were re-made and after much work I had produced many of the small parts to go on the chassis for the motion work.

Last summer my aim was to take on the cylinders and after starting them off on my own and getting well on my way through them something moved while machining the steam ports on the valve face meaning that was a good few hours of machining and an expensive casting down the drain. Once a new casting was through and I was back to the stage I was before, I was then helped to finish off the cylinders by a very skilled engineer who helped to make a wonderful job of them. As things started to come together we attempted to fit the cylinders, meeting with Andrew on a quiet evening at the club we had a fiddle about and things weren't lining up quite right and we started to worry. We started measuring up the chassis and found that the distance between the axle centres was a $\frac{1}{4}$ " too narrow and the centre between the rear axle and the cylinders was not correct either and this produced a lot of problems. After deciding that this chassis we had bought, thinking it would be quick way around the frames, was not going to be usable we pulled out the old material that Dad had purchased with all the castings years ago and starting in the next few weeks I am remaking the frames from scratch.

This has been a major setback in the production of my first engine but is teaching me a lot of things about building and tolerances that need to be met to ensure that the engine is built to a good enough standard to run well.

Seeing 'Little Andy' making his boiler and getting on with it so well it, has given me the enthusiasm to move on with the 'Pea' once my final exams are finished. Andy has made good progress on his project and is well on the way to putting together a wonderful boiler, and after seeing how much effort he puts into his work the rest of the engine looks promising, particularly with the help and determination from 'Big Andy' it will be a brilliant project to watch develop.

Adam

The Youngsters... Building a 5" W&L 'Dougal'

After briefly explaining my progress to date in the last Beech Hurst News, I thought I should continue to explain the jobs that I have carried out recently and the progress I have made.

Before I begin, I think I should to give a quick description of 'Dougal' for those of you who have no idea what I am talking about.

'Dougal' was built in 1946 by Andrew Barclay as an 0-4-0 and was preserved in 1969 by the Welshpool and Llanfair Light Railway in mid Wales. She is 2 foot 6 inch gauge and has been given the W&LR number 8.

'Dougal' still operates today, running in a light green livery, similar to that carried by Southern Railway Bullied Pacifics in the 1940's and carries 'Provan Works No. 1' on the side.

Since I started building the boiler in November 2009, I have kept a record of the work undertaken and the time it has taken me. It has been estimated that it will take me about 300 hours to complete the boiler alone and the table on the next page shows the first 70 hours. Only another 230 to go!

From the middle of March onwards, I have concentrated on turning the inner dome and the flanged piece which has now been soldered into the boiler. The PB1 that I used for the dome was kindly donated by John West and I hope that I have left enough for him to still be able to use it! At times, Andrew and I have been using the old 'make



it up as you go along' strategy as the drawings we are working to make some parts more complicated than they need to be. We have slightly changed the design of the regulator for example as this originally showed the steam take off in the dome being taken to the front of the boiler where there is a screw regulator.

(Pictured above: Both of my firebox plates, throat plate, front tube plate, back head, inner firebox and fire tubes ready for holes to be drilled)

We changed this so that the whole assembly is able to be taken out from the back head in one go for ease of access if any problems occur. This included two more flanged pieces of bronze, soldered into the back head and into the front tube plate and a small ring, this time soldered to the regulator tube itself into which the two pieces can be bolted together, with a trusty 'O' ring in between! Like the Dome, this process involved me using Andrew's Dividing Head to accurately bore 10



holes evenly around the circumference of both the bronze ring and flanged fitting in the back head. **(Pictured above: My main boiler barrel complete with dome soldered in place and fire box sides opened out)**

As I have mentioned previously in the last newsletter, I have been lucky in the fact that Andrew Brock has been able to give me so much of his time and knowledge in the last 8 months, without whom the idea of building 'Dougal' would still be on the drawing board.

Since starting this 'major' project, I am finding a new sort of enjoyment from this hobby, previously undiscovered, from using the lathes and milling machine in our workshop to gradually seeing my boiler 'rise from the ashes' (sorry, no pun intended). I for one will never let a boiler run out of water after seeing for myself how much time and patience goes into producing one of these pressure vessels, and it's only a small one at that.

I am also in the fortunate position of currently taking my GCSE's (O levels for those of you of a certain age) at the moment which means that, from the end of June onwards (or the time you read this), I will be able to devote a lot more time to 'Dougal', with the aim of having its boiler finished and soldered together by the end of the summer, watch this space...

Date	Job	Hours
22nd November 2009	Found steel tube correct size and formed the inner firebox.	1
29th November 2009	Finished off the inner firebox and made the firebox tube plate former.	6
30th November 2009	Looked at drawings.	0.5
1st December 2009	Marked tubes onto tube plate former.	0.5
3rd December 2009	Started to make back head former.	2
6th December 2009	Added radius to back head former.	2
2nd & 3rd January 2010	Marked back head fittings onto former and drilled out.	
	Found & started cutting steel for front tube plate former.	1
6th January 2010	Turned front tube plate former to size on Colchester.	2.5
7th January 2010	Found & started cutting copper sheet to size for all the tube plates.	4
9th January 2010	Finished cutting copper to size & started forming firebox tube plates.	3.5
10th January 2010	Finished forming firebox tube plates and started forming the back head.	4
16th & 17th January 2010	Formed back head and front tube plate, turned front tube plate to correct size.	8
21st January 2010	Draw filed back head.	0.5
24th January 2010	Started to make the throat plate former.	3
31st January 2010	Turned boiler tube to right length and faced them off.	2.5
4th February 2010	Turned a step onto the both ends of every tube.	2
7th February 2010	Finished making throat plate former and cut copper sheet to size.	3
14th February 2010	Started forming throat plate.	4
18th February 2010	Marked, cut and opened out the firebox sides on main boiler barrel.	3
21st February 2010	Cut boiler plates to length and checked size against barrel.	3
28th February 2010	Filed the front tube plate down to size and started making the fire hole ring.	3
4th March 2010	Finished turning fire hole ring.	0.5
5th March 2010	Cut hole out of back fire box plate to fit fire hole ring.	3
6th March 2010	Started making the dome bush by turning down the flange & boring out centre.	3
13th March 2010	Continued turning the dome bush out of bronze.	3
14th March 2010	Continued turning the dome bush.	1.5
Total time:		70

(Pictured right: The fire box plates, back head and front tube plate with holes drilled ready for fitting of tubes and bushes and fire hole ring soldered into place)



(Pictured right: Taken just last Friday the fire box has been fitted ready for soldering, as have the tubes in both the fire box and front tube plate. Also fitted now is the throat plate into the barrel / outer wrapper, which will also be soldered in the next couple of weeks)



Andrew Strongitharm

The Youngsters... A Modified 'Juliet'

Just as a brief finale to this section I thought I would add a paragraph about the cover images. Junior member Hamish bought the pictured 'Juliet' last year and although it was basically ok, there were problems that required sorting out - too many to list here though! The more in depth modifications have included a smaller axle pump, addition of an injector, re-timing the slip eccentric valve gear and making steam tight the front end around the cylinders, which has meant fabricating new inlet and exhaust pipes and making good the jointing around the cylinder covers. All told, these mod's have taken about 12 months but hopefully now the locomotive is ready for action and it will be interesting to see how it performs compared to before! I also think it will be quite challenging to drive, even for some of our more experience crew!

As a last thought, I think the above articles represent an excellent situation currently in our club with many projects by our younger members underway. I hope this continues to be the case and that they can learn the necessary skills to take into the future and one day teach others too. More in August...

Andrew

Recent Social Events Home & Away

With the last edition out at the very end of April there have been plenty of social visits in the last couple of months to report on.

Firstly on the 16th May, we welcomed some of the guys and girls from Chelmsford club to Beech Hurst for a morning fun run and passenger session during the afternoon. Their visits of previous years have often proven to be wet, cold or a combination of both! This time it started cold with some sunshine and then became cold and overcast during the afternoon but at least the rain held off except for a few spits.

Another member, Bob Frost, had come down on the Saturday and was lucky to have a completely sunny and positively balmy (in comparison) afternoon driving his interesting freelance 0-6-0 'Butch' cum 'Simplex' locomotive.

On the Sunday we had a good variety of locomotives, all steam outline, it was just that 4 were bona fide and one was not! The exception was a Dan Jeavons kit-built 'A4' which I last saw in the design stage when we went to collect 'Michael Faraday' several years ago.

Of the 'real' steamers there was a 5" 'Sweet Pea', a 5" modified 'Model Works' 'Jubilee' and John Dalton brought both his 5" 'Britannia' and his 5" GNR 'Single', which was back having won 'Best In Show' at the Harrogate Model Engineering Exhibition. All of the above with the exception of the 'Britannia' had a morning run and then all bar the 'Single' were on during the afternoon. It was somewhat unfortunate that with the weather being as it was there was little trade to be done and many 'ecs' trains were running during the course of the afternoon! Despite this our guests enjoyed their run on our track and I am sure we will welcome some or all of them back later in the year and hopefully we will be lucky to get some better weather next time round! Our thanks go to the guys and girls from Chelmsford for almost single handily running our passenger service that Sunday afternoon, something which they are used to doing at 'home'!

Following on from the visit of Chelmsford we then welcomed about 15 members of the Lavender Line to Beech Hurst on our Club Night in June. Their first visit to us in 2009 proved to be a big success and following on from that we set about something similar again this year. We ran 3 locomotives, Andy & Howard's B1, Ian's Class 37 and Mike C's Class 67, and also laid out a spread of cold snacks and cakes for our guests to enjoy during the evening. The weather, as per last year, was extremely kind although it did get a bit cold later on as the sun began to set. As well as driving around the track, our guests also viewed several locomotives that we had out on display, including Hamish's 'Juliet', which was in steam on the steaming bays and fresh from its recent 'overhaul'. I think I speak for everyone in saying that the evening went very well and I would also like to thank all those who helped prepare for the evening and who helped out during it.



The following Wednesday it was our turn to visit the Lavender Line in a reciprocal manoeuvre. We were lucky again with the weather, it was a superb evening, and along with their 0-4-0 'Peckett' which was steamed specially, there was also the chance to ride the line aboard their ex-Departmental Wickham Rail Bus, view the workshop and sheds (including their new larger 'Peckett'), and enjoy food from a sumptuous BBQ which was going most of the evening. There were 21 of us who made the trip east, much the same as last year, and I am sure I speak for all those who visited in saying that it was a most enjoyable evening with very pleasant company and plenty to keep us occupied during our time there as we mingled with the 'locals'! Through these pages I would like to thank everyone at the Lavender Line for an excellent evening, especially Mike Laker for jointly organising this visit with me and also to John Padgham for manning the BBQ as head chef all evening too. Hopefully we will be able to arrange something similar next

year and I for sure will be looking forward to it...! **(All Pictures above...)**

Our most recent visit, only last Saturday (19th) in fact, was a return to the Chelmsford track, which we first went to this time last year. This time round we took 3 locomotives (assuming you count the Pump Trolley in that) along with 8 people too. Mike C took his Class 67 and Andrew S took the 'Minx', which had only the previous Sunday blown two Superheater elements. Not to be put off they were extracted the same afternoon, I then spent a little 'overtime' in the workshop during the week making a new header and steam pipe, and come the Friday afternoon we had a perfectly good locomotive, complete with no Superheaters! I don't wish to open a debate on this, but we found no difference between the 'tube' Superheaters and none at all, and I for one firmly believe that if you want Superheat then they must be 'radiant' or just simplify it and have none at all!

As with many previous visits we were there in good time to steam up and with the help of two boiled kettles pressure was raised in only a few minutes despite using Wharfedale's electric blower which is sluggish at best! Mike had already gone onto the raised track with the Class 67 and we were next on a short time later.

As the morning progressed we were joined by a Class 52 'Western' and outside



cylinder 'Maid of Kent' too but there was always plenty of room on the track and non-stop runs were generally possible.

Around lunchtime, Mike migrated to the ground level to join a heavily modified 'Model Works' 'A3' which was on one of its first outings and proving to be slightly troublesome with insufficient 'side play' on the front bogie. The Pump



Trolley was also on the ground level for much of day and mostly in the hands of Hamish and Laurie who were unusually energetic! Also at lunchtime, and as well as the excellent salad that had been prepared by the local ladies, we were treated to an impromptu performance of tracks by The Shadows as Bob Frost turned up clutching

two Fender Stratocaster guitars and one portable amplifier!

I had no idea that he played and he said afterwards that he uses this as a bit of sideline when taking 'oldies' out on coach trips! It was nonetheless unexpected but I have to say he is very good and The Shadows are also a great band too!

The afternoon came and went, and we all took turns to drive, talk and enjoy the scenery, whilst dodging the occasional shower that turned up along the way! It was another very enjoyable visit and one which I would recommend to anyone who is available next year. The site is reminiscent of the Isle of Wight track, about twice the size, just with no boating pond in the middle! I would like to thank all the guys and girls at Chelmsford for another excellent visit and particularly to John Dalton who helps to arrange this. We will look forward to welcoming Chelmsford to Beech Hurst again later this year and I for one will look forward to a return there next year too. **(See pictures on previous page)**

Andrew

Forthcoming Events

In order to accommodate all the articles this time, I have condensed the Diary below to the next few weeks only, with later dates announced in the August edition. Basically, over and above the visits to / from Maidstone, we have a Bowls evening organised for our August club night and names will be required on the blackboard in the clubhouse shortly. The end of summer BBQ will then be held on the Saturday of the August bank holiday as per normal. Further visits to / from Beech Hurst + many of the annual winter social events will follow in August, and as a final thought, if anyone is interested in helping out at either the Sandown Park show in December or Alexandra Palace show in January, we are currently collecting names on the blackboard of possible volunteers before making a final decision as to whether there are sufficient numbers to man the stands at one or both of these shows, which we have been asked by the organisers to attend.

Diary of Events

1st July 2010 – Club Night – Will start at approx. 1900

17th July 2010 – Maidstone club to visit Beech Hurst – details to follow

5th August 2010 – Club Night & Bowls Match Evening – Will start at approx. 1800

7th August 2010 – SMLS invitation to visit Maidstone club – details to follow

28th August 2010 – End of summer 'bring your own' BBQ evening from 1800

2nd September 2010 – Club Night – Will start at approx. 1900

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

SMLS 60th Anniversary Celebrations



Following on from the April edition and the window for members to reserve a place on the 60th 'Golden Arrow' train at the Bluebell is now closed. This opportunity is for **already booked** members to reserve a seat for one guest (a refundable £20 cash deposit will be required per guest) and this will be open until a cut-off date of 30th September 2010. After this date, we will offer any remaining seats to other guests of **already booked** members at the price of the meal only (i.e. £41 per person).

The committee will administer and make final seating decisions if necessary. When guests are booked, there will be an opportunity to request seating arrangements (with friends etc...). A seating plan of each coach of the train will be prepared and displayed in the clubhouse well in advance of the event. All deposits will be held...

Please complete the second form below (**only if you have already reserved your place**) to book your guest a place on the train. The next form (for the reservation of additional guest places (if available) at £41pp) will appear in the October newsletter due to be released during the middle of that month.

Further details can be obtained from Andrew B or Andrew S at the club or can be found at <http://www.bluebell-railway.co.uk/bluebell/arrow.html>.



Please reserve my guest a place on the train on FRIDAY JUNE 3rd 2011

.....(Name)

.....(signed)

.....(Date)

Sussex Miniature Locomotive Society Ltd



Rear Cover picture: -

Little & Large – From one of the largest to one of the smallest, Hamish's diminutive 'Juliet' locomotive is dwarfed in the presence of 'Wharfedale' during a recent photo shoot. The 'Juliet' has been much modified since arriving at the club last year and hopefully now will prove much more fun to drive, whereas previously it was a lot less than that!