

EXPANSION LINK

BASINGSTOKE and DISTRICT MODEL ENGINEERING SOCIETY



Volume 8 - Issue 3 – September 2014

Editor Austin Lewis



9F owned by David Giles

Editorial

The year is flashing by again and we are looking forward to the mellow September days although the evenings are drawing in and they quickly cool off. My wife and I have just returned from staying with my brother-in-law in Andalucia, Spain so the change from 30 degrees C, is very noticeable.

Running Calendar

The 7th September is Public Running with a Visitors' Open Day on the 14th followed by Members' Running on the 27th. October is another busy month with Public Running on the 5th, Members Running on the 12th and Halloween Public Running just around the corner, on the 25th October - we look forward to seeing as many members as possible at these events.

Calendar Change

As you may know the Fish & Chips with the Member's Running Day was due on the 27th September but this was moved to follow the Birthday Party Run on the 30th August - as mentioned above, the Members' Running is still scheduled for the 27th.

New Members

We are very pleased to have two new members David Giles and Eddie Turner both from Southampton. David has a 9F and Eddie a 14XX – we very warmly welcome them both.

This edition contains a short article by David on his 9F, photos of public and member running days and a stirring article by Steve Newell on rebuilding his B1.

David Giles and his 9F

5" gauge 9F (92158) was built by my late father Derek Giles and finished in 1995. It started out as a 3 ½" gauge and when he had a running chassis he decided it wasn't big enough so he started out on a 5" engine. He did not want to build Evening Star as everybody builds that engine, he said "I want a black engine, single chimney and large tender" so out of the work shop came the engine you see today.

Last year I finished rebuilding the engine after putting a new fire box in, yes it's a steel boiler with expanded tubes. My good friends Steve Titley and Paul Clarke helped, Steve with forming the new plates of the box and Paul showed me the technique of tube expanding. The sides of the fire box were brought in to give a bigger water space this meant I lost two tubes and two fire bars out of the grate. The holes in the front tube plate are now ½" washout plugs which means I can get the lance of a pressure washer in and give the boiler a good wash out. Doing this alteration has had no affect on the steaming of the loco.

This loco has proved to be a good passenger hauler and a few years ago I pulled 11 passenger trolleys with 37 people on them, I have a few minutes of video of this which I will bring to the club and show you if a VHS recorder is available. This engine is the pride and joy of not only myself but my mother Molly who loves to see it running round giving rides which my father built it to do.



Dave and his majestic black 9F



Public running 6th July



Eddie and Dave



Eddie and his 14XX







Can we fix it? Yes we can – I think

A spot of Light Winter Maintenance...

The diary of a B1 rebuild!

by Steve Newell

The **LNER** - we all know what it stands for, the London & North Eastern Railway, but in my mind when I think about my little B1 and the most famous LNER steam locomotive of them all, 'Flying Scotsman', it definitely stands for Late & Never Early Railway! What should have been a 'light' winter overhaul on my 5" gauge B1 back in 2011 has turned out to be a far greater undertaking than I ever could have envisaged.

It all began in the **Summer of 2011** - I had started the world of work, having just graduated from University and had moved back to 'Hotel Mum & Dad'. I had more time on my hands (oh how things quickly changed!) when I was becoming frustrated with the 'knocking and banging' my B1 used to make when I ran it. I decided it would be a good idea to take the mechanics to bits over the winter months to see what I could do to tighten it all up. The loco's last running day was the 2011 Halloween event and it would be out for about six months, or so I thought.

In **November 2011**, I began by dropping the wheels out and checking the basics to see how things all squared - sadly they didn't. Neil and Darren Davis came over for an examination and confirmed my fears that the horns were not parallel to each other or indeed the frames. I was perhaps expecting the wheel quartering to be out but not the horns themselves. In the usual optimistic way Neil said "whip the boiler off and bring it round ours and we will machine the horns parallel." That was on the Thursday - by the Saturday we had machined the horns all out! The end of November through to the New Year is non-stop at work so nothing really progressed again until **January 2012**.

What I hadn't thought about was how altering one small thing can have such a dramatic effect; by simply machining a few thou off the horns I had made them wider as well as changing all of the wheel pitches. With the help of the Davis's mill again, I was back machining new cast iron axel boxes to suit the new and wider horn slots, with the locos rods also paying a visit shortly after to be bored out to the new wheel pitches. By **May 2012** I had decided to bore the driving wheels out and put them on new axels to rectify a misalignment of a wonky driving wheel and also so the quartering could be done cleanly. Much research was done in anticipation of the wheel quartering, which wasn't actually as bad as it's made out to be. I did learn the hard way, however, about the miracle of how fast Loctite sets...!

I think by this point I realised the enormity of the project I'd embarked on, especially with how little progress had been made on the face of it, especially with all the dreams I had of detailing it all up properly to create a B1 model as faithful to the full size engine as possible. It was also the low point of the project as, whilst we were all enjoying the impending Olympics and Jubilee celebrations, the club Chairman and builder of my B1, Terry Hobbs, sadly passed away. Terry was a big personality in the club and was a great loss; he was also not one for super detailed 'piss assey' models as he called them - which is part of the inspiration for me wanting to detail the B1 up - I would hope the finished article would frustratingly make him proud!



By **September 2012** I had a rolling chassis again - it was a major breakthrough and a pat on the back I had got that far with no previous experience of tackling the serious engineering aspects of model locomotive building before. **November 2012** saw progress with scaling the motion brackets and weighshaft gear. This was also when another substantial problem with the loco manifested itself as I discovered that the frames were not oppositely aligned to each other, with one side sitting 70 thou higher than the other. The problem with this is the weighshaft is not rotating perpendicular to the frames and each side's expansion link is sitting on its own individual centre line. Both expansion links should sit on the same centre line, as prescribed in the valve gear design, so when the loco is in mid gear the radius rods are in the middle of the expansion link – with my loco this was not the case and explains why it was impossible to have both engines in mid gear at the same time! However, with the horns now machined and true, splitting the frames apart was not an option, so I took the decision to relocate the RHS motion bracket down by 70 thou to get both expansion links on the same centre line, thus taking the extra difference in height between the cylinder and expansion link up in the angularity of radius rod.



2013 seemed a slow year, with the cylinders being removed and renovated; Dave Finn from Bournemouth took them away to be honed, so new pistons had to be made and new piston bobbins and rings. I also took a good hard look at the Martin Evans B1 valve gear and was determined that it could be made to look more like LNER practice. With photos of B1 61264 to hand and A1 'Tornado' always available to measure, I designed on CAD computer software much of the valve gear myself, including the radius rods, eccentric rods, crossheads, motion brackets and valve guide supports. It

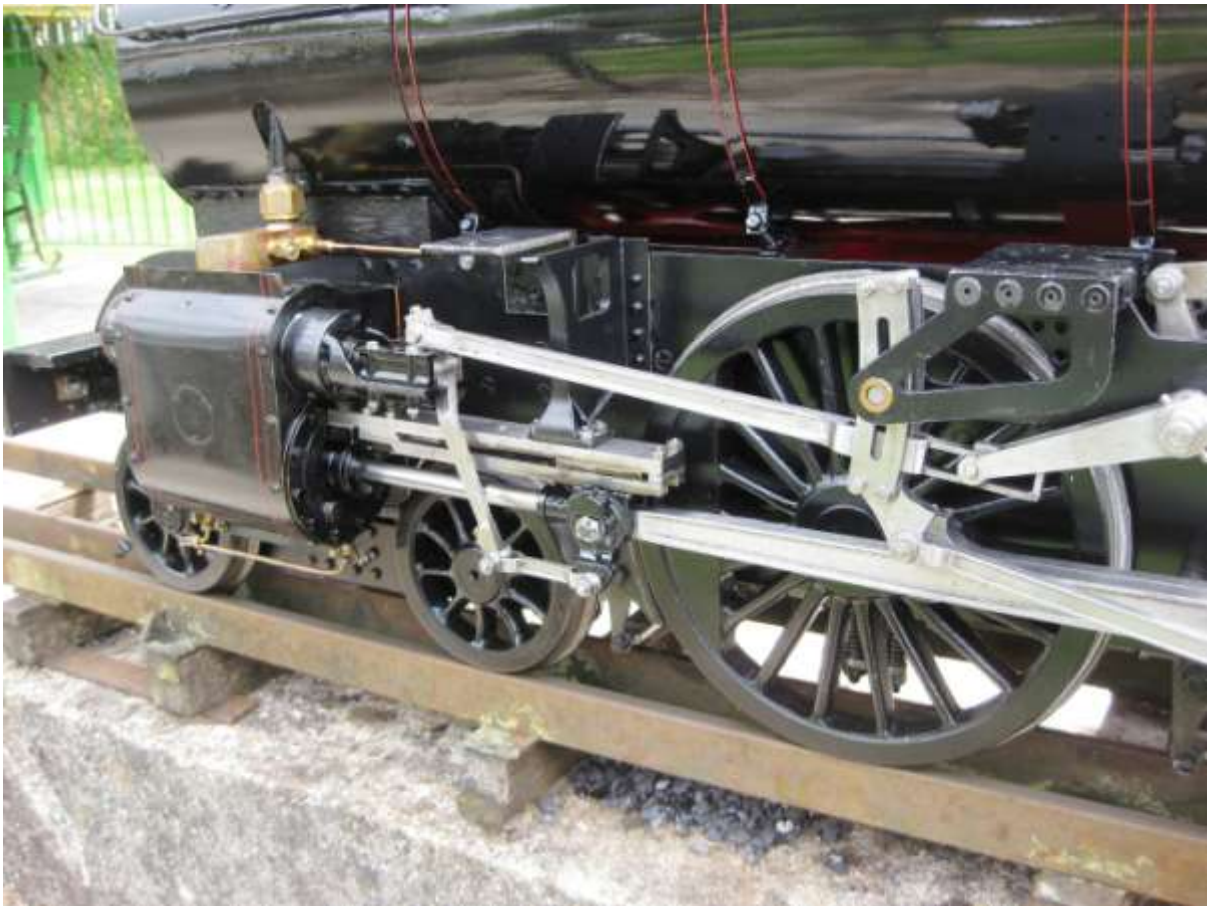
seemed the tipping point had been reached when the chassis was stripped completely and repainted in **August** last year and the bits were beginning to get bolted back on again! By **November**, the chassis was all but complete, only awaiting the eccentric rods and return cranks to be made.



The **start of 2014** saw rapid progress being made, with the boiler cladding stripped back and detailed with prototype home-made B1 washout plugs. The boiler was also reunited with the chassis for a trial fit to allow correct near-vertical outside steam pipes to the cylinders to be fitted. This part of the Springbok design is badly wrong and is unfortunately seldom rectified on most models, with obtrusive steam pipes inclined at 45 degrees to vertical being the norm, when it should be only be about 10 degrees. By **June 2014**, after the kind assistance of Dave Andrews and his mill on which the eccentric rods were made, the missing parts of the puzzle were complete the chassis was successfully run on air for the first time. Five weeks later, with the boiler permanently on and all piped up, she was ready to steam again.

The 'big day' was chosen to be on **Sunday 13th July** (I was ever so slightly put off by the date I should add!). The old girl was slowly woken again for the first time in nearly three years and I couldn't have been more pleased or asked for anything more. The loco steamed a treat as she used to do - everything worked as it should. When I got the loco on the track, she performed faultlessly with plenty of power for over two hours with four crisp even beats linking up to about 20% on the run. The motion was tight and the old 'rattle and banging' had gone, so mission accomplished? Well time will tell.





Ode to Eric the Catering Manager

Down at the Viables Railway Club
a man in the kitchen makes good grub,
so many biscuits for the men to eat
and sometimes bread pudding for a treat.

At Halloween it's sausages and soup,
whilst the men give rides around the loop.
All dressed up in scary clothes,
the smoke in the tunnel gets up your nose.
The people laugh and the children scream
and all agree what a night it's been.

Dirty dishes all washed and done
the food all gone, after all the fun.
So Eric, in his best flat cap,
drives quickly home for a well earned nap.

Clap Clap Clap for Eric

by Pat Lowe June 2014

Ode to Mick the Entertainment Manager

Down at the Viables Railway Den
a meeting is held for all the men.
Every two weeks for an evening of fun
an array of prizes are to be won.
In charge of this is a man called Mick
and over paper towels he gets some stick!

They pay a very modest fee
which helps to buy the cups of tea,
not knowing what there is to win
it's the booby prize that makes them grin.
An exciting parcel in a box
which often holds some bars of chocs.

Once in a while he tests their brains
on a quiz with questions, all about trains.
They laugh and they cuss and make such a fuss,
their efforts on paper, it's been such a caper.
All is done and handed in
and everyone wonders who will win, NOT ME, NOT ME, BUT HIM!
Not everyone can be the sharpest pencil in the box!!

by Pat Lowe June 2014

Basingstoke & District Model Engineering 2014 Calendar (Issue 2 see August & September)

Jan-14

- 1 Members Day (Wednesday)
- 7 Meeting Night
- 18/19 Maintenance Weekend
- 21 Bits & Pieces Evening

Feb

- 4 Meeting Night
- 9 Driver/Public Running Training (Sun)
- 15/16 Maintenance Weekend
- 18 Meeting Night

Mar

- 1/2 Maintenance Weekend
- 4 Meeting Night
- 16 Driver/Public Running Training (Sun)
- 18 Meeting Night

April

- 1 Meeting Night
- 12/13 Miniature Steam Rally
- 15 Bits & Pieces Evening
- 21 Public Running (Easter Monday)
- 29 Bring & Buy Evening

May

- 4 Public Running
- 13 Stationary Engines
- 18 Visitors' Open Day (Sun)
- 27 Meeting Night

June

- 1 Public Running
- 10 Bits and Pieces Evening
- 21 Members Running & Barbecue(Sat)
- 24 Meeting Night

July

- 6 Public Running
- 8 Meeting Night
- 13 Members Running Day (Sun)
- 22 Meeting Night

Aug

- 3 Public Running
- 5 Bring & Buy Evening
- 19 Meeting Night
- 30 Birthday Party Run then Members' Run and Fish & Chips

Sept

- 2 Meeting Night
- 7 Public Running
- 14 Visitors' Open Day (Sun)
- 16 Meeting Night
- 27 Members Running Day (Sat),
- 30 Meeting Night

Oct

- 5 Public Running
- 12 Members Running Day (Sun)
- 14 Bits & Pieces Evening
- 25 Halloween Public Running (Sat Evening)
- 28 Meeting Night

Nov

- 11 Bring & Buy Evening
- 16 Members Running Day (Sun)
- 17-21 AGM (Date to be decided)
- 25 Meeting Night

Dec

- 7 Public Running
- 9 Meeting Night
- 23 Meeting Night

Public Running 11am to 4pm (setup from 9:30am) Sunday, unless stated otherwise

Member's Running days 10am to 5pm

Tuesday Evening Meeting 7pm to 9pm, with optional members running afternoon

Maintenance Weekends - Working parties to keep track & site shipshape. Check notice board for details

Treasurer

Jon Evans
1 Grosvenor Close
Hatch Warren
Basingstoke
Hampshire RG22 4RQ

01256 471233
Jon.h.evans@btinternet.com

Secretary

Brian Hogg
14 Fontwell Drive
Alton
Hampshire GU34 2TN

01420 543581
brianjhogg@btinternet.com

Newsletter Editor

Austin Lewis
16 Church View
Hook Hampshire RG27 9HP

01256 764765
arlewis01@gmail.com

Email Addresses

If you have received a copy of the newsletter by post, it is because we don't have your Email address. Each newsletter costs over £1 to print and post, where as Email is effectively free. If you do have an Email address, which we can use, could you please Email me with your details.

Jon Evans
Treasurer

Who's Who

Chairman
Vice Chairman
Secretary
Treasurer

Bob Lovett
Colin Stubbs
Brian Hogg
Jon Evans

Committee Members

Barry Spender	Member
Dave Andrews	Member
Darren Davis	Member
Steve Newell	Member

Project Leaders

<i>Catering manager</i>	Eric Widdowson
<i>Electrical Work</i>	Jon Evans
<i>Library</i>	Ken Jones
<i>Station Buildings & contents</i>	Dave Andrews
<i>Publicity</i>	Dave Mitchell
<i>Track maintenance</i>	John Hutson
<i>Site maintenance</i>	Eric Widdowson & John Neal
<i>Traction Engine Track</i>	Austin Lewis
<i>Webmaster</i>	Mike Bowman
<i>Newsletter</i>	Austin Lewis