

## DIARY

### November 2011

Sunday 27th Santa special 12.30

### December 2011

Sunday 4th Public running 13.30 onwards  
Friday 9th Sandown Park Model }  
Saturday 10th Engineering }  
Sunday 11th Exhibition }  
Saturday 10th Club running  
Sunday 11th Santa Special 12.30  
Wednesday 21st Christmas meal 12.00 for 13.00  
Monday 26th Boxing Day Steam Up 11.00  
Thursday 31st 0 gauge running

### January 2012

Sunday 1st Public running 13.30 onwards  
Saturday 7th Club running  
Monday 9th Committee meeting 20.00

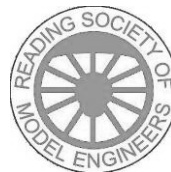
Opinions expressed in PROSPECTUS are the personal views of the contributor and cannot be taken as reflecting the views of the club committee or editor

**The deadline for the January PROSPECTUS is  
18 December This is the final date.**

Contributions from all members are greatly welcomed  
They may be submitted in hard or soft copy to the editor.  
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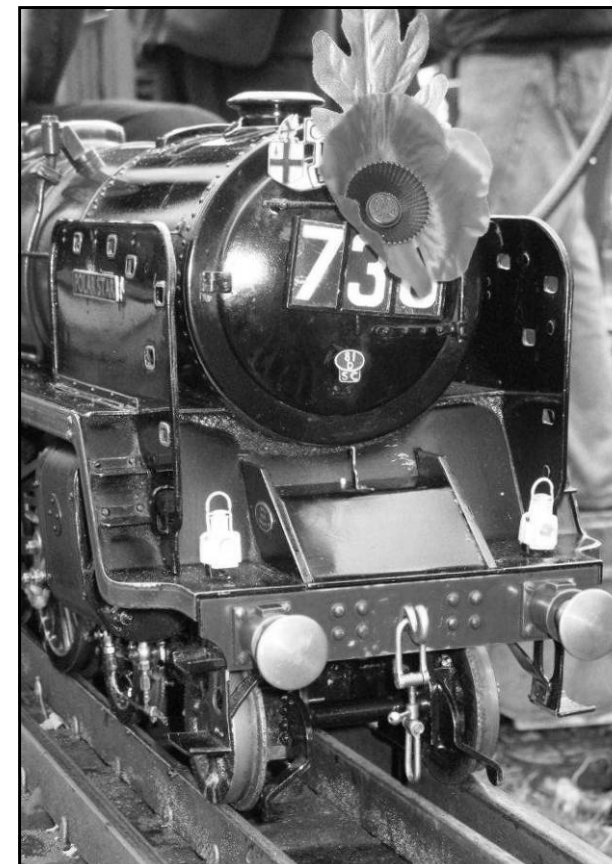
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Free to members

50p when sold

# The Prospectus

## December 2011



Rob Denton's 3.5" Britannia "Polar Star" wears its poppy with pride. Photo Graham Bilbe

**DAWSON'S DIARY**

**61249**

**WOLVERTON PUG**

**ANNUAL GENERAL MEETING**

## DAWSON'S DIARY

### kept by the President

I was pleased to see this year's AGM so well attended. We had over half the membership in the club house. I can now see why we need some sort of extension. It is good to see that idea is going to be carried out sometime. I must thank the committee for being so well organised this year. Rob Denton ran the meeting very well. We cannot say we could not hear what was going on as he used a mike this time. I wish the members of the re-elected committee another good year in office also welcome Mike Smith on the team. Keep up the good work.

Thursday fish and chip run was once again very well attended also some visitors from Bracknell club who brought along locos to have a run on our track. One good thing we enjoyed a nice meal with an added bonus of it being Stuart Kidd's birthday who brought along some very large gateaux which were soon consumed by all. Some of us had a second, me included! In all, a very nice night at Prospect Park.

The club had another bumper public running day. We had very good takings once again Jim Brown was seen with a grin on his face counting money all good for keeping RSME going.

Rob Denton got hold of some very nice notice board which we can use as a back board on the club stand at the Sandown Perk ME exhibition. They look very smart when fitted to their bases. This will improve our display. We had a good response from the membership wishing to exhibit their models etc.

Once again Alan Thatcher has produced yet another hit and miss stationary engine of another design in record time. We wish him well in the exhibition competition section.

Please could those members stay behind to lock up the club house. Please make sure the electric is turned off in the coal shed that supplies the water pump, also turn off the tap to the 7 1/4" steaming bay. It was forgotten last public running day. If we get a leak the pump will burn out so once again see that it is switched off! Thank you.

## ENGINEERING PONDERINGS

by 61249

### HST introduction - other running gear issues

Having given readers the chance to make engineering choices on a safety issue last month, we can look now at more cases of failure that could have, and in one of did, derail a train. Dealing with the derailment first, it did not come on the Western, although we had the problem. The derailment was at Northallerton on the Eastern, and the reason was a gearbox bearing failure.

## ANNUAL GENERAL MEETING 27 OCTOBER 2011



Pictures by Thomas Biddle

. The only cop in there was a Euston –Watford 3-car EMU! But I did note a double headed electric parcels train behind E3102 and E3007. (AL6 and AL1-New and not so new). Back at Paddington and Brush Type 2s were taking over from the NBL Class 22's (which had ousted the pannier tanks, only about 5 years previously). 5 of these Class 31s (nos 5528, 5530, 5535, 5536, 5539), were the first arrivals and they were put to work on empty coaching stock duties between Old Common and Paddington. They were transferred from Stratford (30A), which at about this time had received an influx of class 47s from Immingham, Tinsley, and Thornaby plus rather strangely two WR named ones from Bristol Bath Road (1676 *Vulcan* and 1677 *Thor*). I think this was all part of speeding up the Liverpool Street – Norwich service with class 47s.

Noted in the Paddington area that day were 5528 and 5536 in the new Rail Blue livery. NBL, no. D6328 also in the new blue was seen still providing a service to the London Division. (*to be continued*)

### The Committee for 2011/12

The AGM elected the following members to the committee of the RSME

Jim Brown Treasurer  
Andrew Day Secretary  
Rob Denton Member  
Tony Giles Member  
Brian Murby Member  
Stuart Kidd Member  
Mike Sinclair Member  
Mark Smith Member

### Saturday Working Parties

**Following the AGM the committee is seeking members who want to form a Saturday working party like the “Wednesday Warriors”. This will enable members who can’t help during the week to attend over the weekend. If you want to volunteer as either a helper or an organiser please give your name to any of the committee members.**

**Andrew Day, Secretary**

The HST gearbox lubrication was a departure from heavy motor lubrication. On a class 47 the lubricant is put into the gearbox in solid lumps, is very heavy, melts with the frictional heat in the box but remains thick. The bearings are greased at regular intervals. By contrast the HST box was lightweight, the lubricant a much lighter oil, and the bearings were splash fed. The result was that keeping the gearbox oil tight was a bigger challenge and more time sensitive. A leaking 47 gearbox created a big mess outside the box well before enough lubricant was lost to cause a problem. The shiny black deposit would be very hard and very visible. On HSTs, using a lighter oil meant that more would escape from a similar leak, and the external impact would be a slightly wet surround to the filler or bearing that could easily have been caused by careless filling or similar. Furthermore the whole of the box contents could go AWOL in a very short space of time. Running the box without oil caused bearing as well as gear damage. Bearing seizure would stop the wheels going round, wearing a flat on the wheel that would deepen until the wheel flange hit something important like a point blade.

The time issue becomes important, as it is well within the realms of possibility that the box would be full at the start of a journey, be damaged, lose its oil and empty during the trip. After Northallerton some tests showed that some boxes used over 10 pints of oil in a month. The maintenance schedule originally had the oil level check on the B exam, at monthly intervals. With a capacity of only 4 pints it is clear that something had to give. The schedule was amended to carry out the check on the daily exam, although this was not fully implemented on the Eastern until after their derailment. Thankfully on every occasion when we had a seized box on the Western fleet we found it before it failed, and quite possibly this was because most of our runs were shorter than the Eastern's. In August 1979 at Northallerton a wheel that had been in trouble since Retford, had probably seized at York, hit some points and the whole train was derailed. Just one passenger was detained in hospital for one night, and there were no other injuries. This remarkable result is another tribute to the excellence of the train engineering.

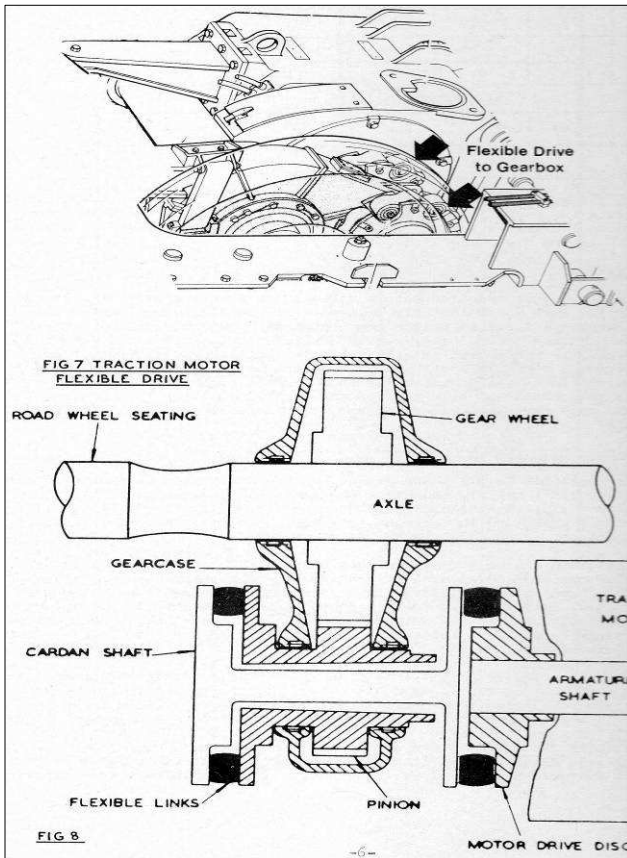
Our early experience of the problem of leakage and low oil levels was not altogether positive, we had seized boxes on more than one occasion, but thankfully caught them all before they turned nasty. The train would be disabled of course, the offending wheel lifted into a “Skate” and the train taken home at very slow speed after traffic that evening. One of the theories at the time was interesting, and explained why this had never happened on the prototype, but was a problem on the production train. This was that on the prototype the same gearbox design was manufactured in sheet steel. The wall thickness was very thin and the lubrication worked. For production trains,

owing to supply difficulties and in an effort to further reduce the unsprung mass at the wheel/rail interface, the gearboxes were made in aluminium. As a by-product of this change the wall thickness was considerably increased, and the oil capacity of the box decreased. It is quite possible that without sophisticated modelling of the lubricant flows, they had been changed to the extent that the amount of oil reaching the bearing had been reduced to a critical level, Any deficiency of oil level had therefore become much more apparent to the bearing, but it had no way of telling the world so until it seized. So it did. Another reminder of how in railway engineering a small change can produce a big effect. That is what makes it so much fun.

Longer distances and different operating procedures on the Eastern Region led to the derailment, but the problem was the same. This reminds me of two other problems affected by different patterns of use of the trains. I am actually writing this article on an East Coast HST running non-stop from York to

King's Cross, 186 miles. This never happened on the Western. In the darkest days of trying to keep water in the Paxman engine, the Eastern resorted to putting 45 gallon drums of coolant in the guards van next to the engine with a hand pump. This kept them going. On the Western we had bowsers on the platform and felt very superior about it, seeing the drums in the guards van as Heath Robinson or Mickey Mouse engineering. It was of course, a different circumstance, not superior maintenance at all that kept us from the same action.

One other event relied,



Reading the previous day. I assume they were hidden somewhere nearby and had not reached the yard yet. The speed of despatch should be noted-bearing in mind D6344 only arrived in South Wales two days earlier!

Saturday 7<sup>th</sup> June I decide to set off for the ironstone mines near

Corby in Leicestershire trying to track down the Teddy Bears that had already been sold from BR service. Well I found none. I travelled from St Pancras to Kettering and caught a bus to the Corby steelworks. In those days one could walk into the steel complex relatively nonchalantly without let or hindrance. There had not been any real terrorist incidents on the mainland up to then. I observed a number of saddle tank locos about the place and could have walked more or less under the Bessemer Converters and slag ladles. A hot environment on a hot day! I returned to Kettering station empty handed and settled down to watch traffic there, as there was some time before the next train south. It was a very hot day and I flopped onto a bench seat. Whilst musing on the rather pointless day I became aware of the distant sound of marching army boots on gravel, punctuated by a very large stentorian voice bellowing 'come on get yourselves sorted out'! This was some distant parade ground and the Sergeant Major was obviously suffering in the heat!

The only noteworthy observations were class 45 D66 northbound hauling Kent Coast electric units 7002, 7102 and 7103-all still in green livery, which I believe were heading for a scrapyards in Chesterfield as being non-standard. I also copped D2 *Hevellyn*.

On the 14<sup>th</sup> June I set off for Manchester via Euston. On arrival at Piccadilly I then travelled to Sheffield Victoria via Woodhead behind 26040 I think and returned from Sheffield Midland to St Pancras behind a Peak. Noted at Derby Technical Centre were AL6 (Class 86) E3173 and Southern Region Crompton D6570 still in green livery.

21<sup>st</sup> June I went south to Basingstoke then up to Waterloo, noting my last of the 10 converted powerful electro diesels (class 74) E6104. Then across to Victoria, noting the two 5-BEL Brighton Pullman sets, which by then would have been in the new Rail blue/grey livery, and across to Euston. The only

I came back from Pompey via the coast to Brighton noting condemned Brighton line stock in sidings (3x 6-COR and 3 x 4-LAV units). I travelled via Redhill observing that *Britannia* was still on Redhill shed! Thence up to Clapham Jn to spend some time there being in time to see the Brighton Belle Pullman. On into London Victoria and across to Euston copping a three car Euston-Watford set.

We had a week in Cornwall from 10<sup>th</sup> to 17<sup>th</sup> May. Apart from going to listen to The Mousehole Male Voice Choir practicing in Mousehole-which was magic, I managed to get to Plymouth Laira yet again, Newton Abbot and Exeter, travelling by train. The usual stock of condemned hydraulics languished at Laira including D800/01/02/58/65 with D830 and D857 condemned at Newton Abbot. Saturday 24<sup>th</sup> May was Euston, Crewe, Manchester Piccadilly, walk to Victoria and out to Bury again. The EM2s plus *Tommy* were all still there and the stored WC electrics had now reached 22, comprising 12 of the 15 English Electric class AL3 E3024-E3035, E3098, E3099, E3100 (missing were E3028 and E3031 and E3100), 9 of the 10 General Electric class AL4 E3036-E3045 (E3043 was stored at Rugby). They were eventually overhauled and returned to traffic with new TOPS numbers 83001-83015 and 84001-84009.

On Wednesday 29<sup>th</sup> May I arrived to see Hymek D7073 hauling condemned class 22s D6341, D6335, and D6344 through Reading en route to Cashmore's scrapyard, Newport. The following day the same Hymek came through hauling D6355, D6351 and D6355 heading for the same fate.

Saturday 31<sup>st</sup> and I set for South Wales, and outside Swindon Works were 12041 and 12042 from Saltley waiting scrapping. Teddy Bears D9500/02/09/14/18/19/21/24/26/27/30/35/36/38 9555 were seen dumped at Cardiff Canton. So it included the first and last of the class. Also on Canton depot was a vehicle which looked like a horsebox numbered DS70185 and branded 'Southampton Docks Train Heating Boiler Van'. I can only guess it was heading for Mr Cashmore's insatiable appetite.

I naturally paid my usual respects to Dai Woodham's at Barry, finding apart from the steam the following diesels D8206, D6122, D600, D601 of which D8206 was a new arrival since my last visit.

Round at Mr Cashmores at Newport I found the remains of D6306/11/17/24/25/29/35/41/42/44. But no sign of the second 3, D6350/51/55 I had seen passing



I am sure, on another difference between the two railways. One evening, my brother who was Depot Engineer at one of the Eastern Region HST depots rang me as part of a service panic. "Have you ever had an epidemic of broken windows?" was his question. He described how that afternoon a window had been broken in a stone throwing incident (Doncaster I believe). When the service had gone to bed some 6 hours later there were over 100 broken windows on the ER HST fleet. The mechanism was that the outer skin broken in the original incident had become dislodged when that train passed another at speed. The broken pieces had bounced between the trains and broken further windows on each train. The same thing then happened the next time trains passed at speed, affecting a third train, then a fourth, fifth etc. Further analysis showed that a batch of defective windows were the ones that broke, but I am convinced that the reason we never had this phenomenon on the Western (and we did have some defective windows) was down to our great Englishman, Isambard Brunel. The gap between the Up and Down lines on much of the 200kph running sections of the WR is wider than on the Eastern, due to the broad gauge to standard gauge conversion. Interesting how 100 years later this benefit was realised!

Both this event, and gearbox failure, illustrated two things for me. One is the tendency for the unintended consequence to catch you out unless you understand the engineering in great detail. Second was the importance of understanding the railway, its infrastructure, and the service pattern as a complete system in which the train operates. Change any one parameter, however trivial, and the world may change radically. Once again, that is what makes railway engineering such fun. (*To be continued*)

## NOT THE NO GAUGE NEWS

Jim Brown

The 0 gauge group had a running session on 21<sup>st</sup>/22<sup>nd</sup> October. Our Lydford Road layout was assembled on the Friday evening and tested ready for running on Saturday. The full layout can just about be squeezed in diagonally across the clubroom by removing one of the front baseboards of the 00 gauge layout. This time we managed to fit in both long fiddle yards. The layout ran well and we hope to schedule more running sessions on a monthly basis in future.

The next session will already have taken place on 18<sup>th</sup>/19<sup>th</sup> November by the time this is printed and we have provisionally booked another session for 30<sup>th</sup>/31<sup>st</sup> December. These Saturday running sessions will normally start at about 11.00 am and finish between 4.00pm and 5.00pm, but please contact Tony Giles or myself for conformation of dates and times.

Work on the Scottish layout had ground to a halt over recent weeks following the death of Neil Herd. We intend to start working again each Friday evening to finish the layout to the standards Neil would have wished.

The layout is booked for an exhibition in February 2012 so we need to push on with the jobs that need finishing.

### A reminder from the Treasurer

**Subscriptions are due on 1<sup>st</sup> January 2012.**

If you wish to pay your subscription, please see me at the clubroom or send your cheque and SAE to:- Jim Brown, 655 Oxford Road, Reading, Berkshire, RG30 1HP.

Following the decision at the AGM the new annual subscription rates are:-

Ordinary membership	£42
OAP membership	£28
Junior membership	£14
Associate membership	£14
Joint membership	£63
Family membership	£70

**I would remind locomotive owners and drivers that to ensure that their public liability insurance cover remains valid we recommend that you pay your subscription before the due date.**

## CHRISTMAS LUNCH

### Sindlesham Mill

Wednesday 21<sup>st</sup> December (provisional)

3 course Christmas Menu

Price £15.00 – (over 50s £13.00)

Payment in advance to Tony Giles

If you wish to book your place for this event booking forms are on the notice board in the clubroom, or contact Tony Giles

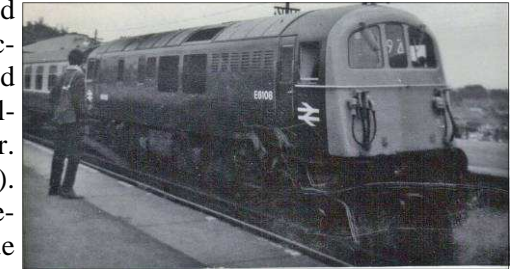
## HOW DO YOU BECOME INTERESTED IN RAILWAYS?

Part 11

### By Wolverton Pug

#### More of the Same

Saturday 26<sup>th</sup> April I went to Eastleigh via Basingstoke. I saw a number of the short lived powerful Electro Diesel conversions (class 74), which were 2,550 hp. They were converted from the E5000 series straight electrics in 1967/68 for the accelerated Waterloo-Bournemouth service following the end of steam that year. 10 were converted (E6101-E6110). But they only lasted 9 years. I believe, according to an old colleague who worked in Redhill Control (Not South Western I know!), they were too technically advanced, with what was then state of the art electronics and prone to failure on the main line.



Back then another interesting place to pass were the wartime sidings at Micheldever. This became a collecting point for redundant Southern Railway electric stock mainly ex Pompey 4-CORs and some old de-icing units. Also present on this day were two oddities. The 7-car trailer unit no.701, made up of an assortment of non-powered electric stock (ex Southern Railway-Brighton Line vehicles I think) also the 8 VAB no 8001 a very powerful 8 car electric unit which contained no less than 3 powered vehicles plus a buffet car. It was formed of Mark 1 (4-VEP) Bournemouth Electrification stock to supplement the Bournemouth line service.



Warship pairings were all the rage on the Western Region, through this period. They would often stay as pairs for some weeks. This of course allowed a build up of grime (brake block dust etc) on the two centre nose ends, which was accentuated by the full yellow livery! Saturday 3<sup>rd</sup> May I went via Guildford to Portsmouth and over to the Isle of Wight to see the 'new' (1923-31) ex LT stock units running as 3 and 4 car sets (4-VEC, 3TIS). I also saw the island diesel shunter D2554 which was sent over when the line was electrified to haul engineering trains It was formerly based at Parkeston Quay. I saw all but one of the units (037)-which had been disbanded.