



The Friends of the National Railway Museum

Briefing 72

South of England Group

December 2013

Vice Presidents – Sir William McAlpine Bt., FRSE, FCIT, FRSA; Richard Hardy

AGM AND NEW YEAR SOCIAL

The Annual General Meeting of the South of England Group takes place on 13th January 2014 and will, as usual, be held at Marylebone Station in conjunction with our New Year Social gathering. Activities will commence around 19:00, with doors opening from 18:00.

Any member of the FNRM, whether living in the South of England or not, can attend and vote at the AGM. The meeting will take a report of last year's activities from our Chairman, Ian Harrison, and from our Treasurer, Roger Smith, who will describe the, very healthy, state of our finances. There will be a vote, if necessary, for the rotating membership of the Group's committee. This time, the three-year terms of Ian Harrison, Alan Gosling and Les Butler are due to end. They can, of course, agree to continue for another term, but we are always happy to have nominations from any member who would like to join the committee and help run the Group's activities.

Les Butler will take views on the proposals for the Group's summer outing to Gloucestershire, which will take in

Dean Forest Railway, the Flour Mill Locomotive Works, Perrygrove Narrow Gauge Railway, the GWR museum at Coleford, and Tintern Abbey and Station. Before and after the AGM there will be an opportunity to chat with others over a drink, and enjoy the food from the buffet. You will also be able to watch some of the photographs of the Group's activities with a suitable quiz.

Attendance at the AGM is free, but to cover the festive buffet refreshment for the New Year Social, there will be a charge of £8 per person (the same as last year). Those of you who came last year will remember that we enjoyed a good spread, courtesy of M&S, and we anticipate the same this year. A form is included with this Briefing to allow you to indicate whether you require refreshment. We would be grateful if you would return this, with a cheque, to Roger Smith (address on the form) by Monday 6th January. This will allow us to order sufficient the food and drink for the evening and make sure there is enough for everyone

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EVENING LECTURE - RESTORING CHELTENHAM

Chris Smith from the Mid Hants Railway, joined us on 14th October. His story started in 1930 with the need for bigger engines on the Hastings line – more powerful but still fitting within the 8ft 6ins wide loading gauge and the turntables in Kent. The solution was to fit together the wheels and cab fittings from a *Lord Nelson*, with the boiler from a *King Arthur*. The result was the successful 4-4-0 Schools class, of which No 925 *Cheltenham* is the example in the National Collection.

Cheltenham went to Fratton when new, before moving to Kent. When the Kent lines were electrified in the 1950s, the loco moved to Nine Elms and then Basingstoke, where it remained until withdrawn. *Cheltenham's* fame rose when it appeared as the mascot on the RCTS magazine, and it was used on many RCTS railtours, including 'foreign' lines, such as the Great Central, and the East Coast mainline, where it touched 80mph. When it came to choosing a Schools Class locomotive for the National Collection, there were 40 still in traffic, but *Cheltenham* was chosen because of this fame. It was initially stored at Fratton, then Tysley before moving to York. It needed very little work before it was steamed for the Rainhill celebrations in 1980. It then ran a while at Dinting before suffering a tube failure, when it returned to York for static display.

So things remained until the NRM asked the Mid Hants Railway, which had restored *Lord Nelson*, whether they were interested in *Cheltenham*. A deal was struck which involved MHR removing the asbestos and then deciding whether to restore and use it on the railway. It was moved from York to Eastleigh in October 2010. The following month, Chris was successful in securing a Lottery Fund bursary to assist in the restoration of the

engine. Meanwhile, contractors had removed the asbestos from the boiler and cylinders. BR had fitted a new firebox as part of its last full overhaul in December 1958. The platerwork and boiler stays were in excellent condition; all it needed was a retube.

The restoration team were recruited, younger members teamed up with more experienced people and, with a five-day working week, team moral was kept high because of the rapid progress. The job started with the removal of the smokebox, which was riveted to the frames, and then, using the facility's 30t crane, the boiler was removed and sent to Ropley for repair.

The frames were lifted in April 2011. No paint was apparent underneath – BR had just relied on the grease and grime to preserve everything. The NRM had originally thought that the crank-axle had a crack, but ultrasonic inspection proved it to be sound. The brake cylinder is a 30ins diameter casting which is a tight fit underneath the cab, and it needed careful, and complex, handling to get it out. A series of photographs were taken of the operation for use in reverse when the time came to put it back. The draw-bar pin was wedged solid – a jack, which was trying to push it out, just lifted the entire engine! It needed several weeks of penetrating-oil treatment and various methods of “persuasion” to get it to shift. The locomotive wheels were sent to South Devon Railway for turning and the tender wheels got the same treatment at Wimbledon TMD. Pipework was repaired by brazing rather than replacement. The piston valves just needed new rings fitting. Only a few rivets needed attention on the tender which was otherwise water-tight, but the leaf-spring pins needed replacing due to wear.

A new main steam pipe was fabricated by

a specialist steam engineer at Southampton Docks. A new complex casting, to connect the outlet from the inner cylinder to the blast pipe, was made by Reliance in Kent.

With the approval of the NRM, some modifications were made to the locomotive to make for easier operation. These included moving the steam-chest pressure gauge to the driver's side and the boiler pressure gauge to the fireman's side. End-of-day engine disposal was helped by installing a rocking grate and a water spray to the top of the fire-grate to flush out ash. A hose-pipe fitting was attached to the base of the tender for easy filling when there is no water crane. Grease nipples were fitted at various points to ease lubrication.

In Summer 2011, just over 6 months into the project, the NRM were so impressed by the progress that they asked for it to be available for Railfest the following year.

The pit was conveniently free when the time came to re-unit the wheels with the frames. The exercise started at the front, with the frame slightly tipped forward. Only three people were involved on the

ground in the operation, two helping to line up the axle boxes, and one giving signals to the crane operator.

Christmas 2011 saw the boiler being steam tested and it was returned to Eastleigh exactly a year after it had left.

Throughout the work they only found two items which were not original, a slide valve cover and slide bar.

The May Day Bank Holiday weekend was the time for the press launch, which was covered by local press and radio, the NRM PR team generating the interest. All that needed doing was the final painting before the engine was moved by road to Railfest at York. Once that was over, the engine was returned to the Mid Hants to fit the rocking grate and then hold a series of running in trials. This culminated in a final test run double-headed with *Lord Nelson* in August 2012. It was then engaged in steam gala events and in October went to the Great Central Railway to appear alongside *Sir Lamiel*. In May of this year, it visited the Gloucester Warwickshire Railway, then the Severn Valley Railway before returning to the Mid Hants for the winter.

GOING ROUND IN CIRCLES

Members with long memories will remember our first Vice-President, Captain Bill Smith. It was Bill who privately bought the first standard gauge locomotive from BR – J52 No. 68846 (aka GNR No 1247) – before Alan Pegler and 4472 – and ran her on preserved and main lines between 1960 and 1980. When costs became too much he donated her to the NRM who operated her between 1980 and 1999. One Steve McColl had her repainted into BR black at the East Somerset Railway in 1996 (which Bill didn't much like) and after his death in 2003 this group paid for her to be put back into "Bill's livery" – GNR green – in 2008, as a memorial to him. On 3rd July 1993 BR named a class 33

diesel after Bill: No 33109 *Captain Bill Smith RNR*. We, the Friends, paid for some supplementary plates that were fitted to the loco and told the story of Bill and 1247.

A set of these plates was given to Bill at the time and found their way to a railway-themed restaurant at Castle Ashby near Northampton. This has closed and the owners were selling up. Our local spies picked up the auction sale and alerted us to the fact that Bill's plates were included. The auction was an online affair – always very difficult to know how to bid into when you can't see the whites of the other bidders' eyes.

After some tense moments we were successful in acquiring the two plates.

They are being gifted to the Museum by a member of the SoE Group and we hope that they will find a place where their importance can be recognised. We had hoped that they might find a home in the Friends office – Bill was the first Life Member of the Friends – but apparently the walls aren't big enough!

The loco is now on the East Lancs Railway in BR blue and has been refitted with copies of its descriptive plaques (the originals seem to have “disappeared”!) – see

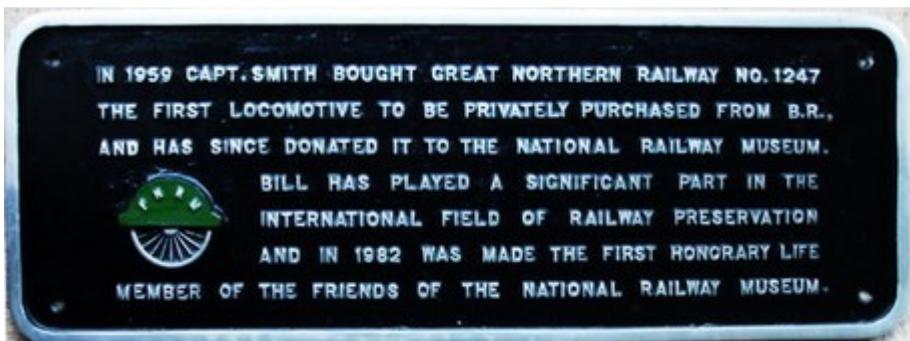
<http://www.elrdiesel.info/documents/fleet-profile-33109.pdf>

CAPTAIN BILL SMITH RNR NAMEPLATES



Bill at the naming of No 33109 on 3rd July 1993

and, below, a close up of the FNRM information plate.



WORKING ON 34051



A man happy in his work: "Dr Bob" - a retired anaesthetist and MHR volunteer - gets down to the bare metal under Winnie's front frame

STEAM ON THE UNDERGROUND



Some of the photographs used by Andy Barr for his talk on Heritage Operations on the London Underground. From the top: Met No. 1 and Coach 353 at Baker Street during the dress rehearsals; Met No1 with a Class 20, coach 353 and Sarah Siddons, at Harrow on the Hill; The Ashbury carriages at Earls Court; Met No 1 with more modern LT stock. See overleaf for lecture report.

(photographs © Andy Barr and London Underground)



HERITAGE TRACTION UNDERGROUND

Andy Barr, MBE, gave a fascinating insight into the work involved in the recent 150th celebrations. Andy was considering retirement in 2012. However, his boss offered him the post of Heritage Operations Manager – it didn't take too much persuasion for him to accept!

The London Transport Commissioner, had already decided to run steam trains for the event and Andy was asked to organise it. While London Underground has access to vintage motive power, it didn't have any suitable carriages. So he approached the team at the Bluebell Railway who were willing to loan some vehicles. The ORR had to agree derogations from a range of current railway standards. To meet fire precautions, a trailing, electric-powered, locomotive would start the train, thus avoiding the steam locomotive from emitting sparks onto the wooden coaches. The smoke and fire detectors at stations needed modification, but this was helped by most being reprogrammable from the control centre.

It was agreed to use 0-4-4T Met No 1 but this required overhaul, so £250k was provided to the Buckingham Railway Centre, but the work had to be completed by November 2012. The tender for the work was won by the Flour Mill. The locomotive was stripped, the boiler overhauled, everything checked and repaired and then rebuilt. It was found that the horn-blocks were some $\frac{3}{4}$ inch out of square and needed correction. One unusual thing about the locomotive is that the tyres are bolted to the centre, and several of the bolts had suffered fatigue fractures and needed replacing. It was then run-in on the Avon Valley Railway and Severn Valley Railway, the latter allowing 50 mph running.

The restoration of coach 353 was supported by the Heritage Lottery Fund.

It was rebuilt from derelict condition by the Ffestiniog Railway. A steel underframe was fitted, along with air and steam brake, and LED lighting to simulate the original gas lamps. The Ashbury coaches, which had been converted for EMU use before 1921, were restored back to original condition by the Bluebell Railway. The final piece of rolling stock was a 1896-built 4-wheel milk van, which had seen its last use in 1963. After restoration it was used to haul emergency equipment. *Sarah Siddons* was also to be used in the celebrations but needed to be re-fitted with vacuum brake to be compatible with the steam stock; this was done at Eastleigh.

Andy now needed to look at the operational management. This involved getting route agreement, organising safety systems, and training for staff and volunteers. Fitters were to ride on the train for rapid response in case of problems, and stewards were put on every coach to oversee passenger safety. All the staff and volunteers were provided with “crib sheets” to “educate” passengers on the use of the antiquated stock – such as not putting heads or arms out of windows. The Beattie well-tank No 30587 was borrowed from the B&WR in February 2012, and proved that the operation of steam locomotives in the tunnels was possible. The first full trials took place at night in December 2012, with Met No. 1, coach 353, flat wagon (with spare water) and *Sarah Siddons* at the rear. Following this, the stock went back to Acton to receive its final painting and lining. The full rehearsal took place in early January before the real runs on 13th and 20th January. The rehearsal showed that some intermediate signals were being hidden by drifting steam, so a video camera was mounted on the buffer-beam to give a good view ahead. Andy played a

recording of one such run which gave a fascinating new view of a trip along the Met/District line. The plan had been to go back to Lillie Bridge Depot via the Hammersmith & City for overnight storage, but they were routed along the District Line to Gloucester Road. There were some startled views from the few ordinary passengers waiting on the platforms, although all seemed to love it with waving, cheering and clapping.

In April and May there were runs to Amersham. This time the 4TC stock was used. The volunteer-drivers from the Buckingham Railway Centre were checked for competence by an expert. Three steam locomotives were needed: Met No. 1, GWR Prairie No. 5322 (running as L150) and Pannier No. 9466. *Sarah Siddens* and two Class 20s were used on the rear of the trains, and all needed to be fitted with trip-cocks. One novel arrangement was that Bachmann produced a model of the Class 20s in a

suitable livery, and London Underground painted the real one to match the model!

Because a Class 20 + *Sarah Siddens* + 4TC was around 400t load, the Met No. 1 was not powerful enough to handle the train, so the Class 20 gave assistance. On the operation side, the coupling and uncoupling had to be done over non-electrified lines, which meant some shunting. To reduce boarding delays all loading and unloading took place at Amersham and passenger had wristbands rather than tickets

That's not the end. August 2014 is the 150th anniversary of the Hammersmith and City line. Next year is the LTM's "year of the bus" so the vintage trains will link in with vintage bus operations. There will also be runs of the 1938 Tube and A stock. In 2015, the Q stock is scheduled for return and there could be further steam runs in central London.

I suspect Andy is going to be very busy over the coming years.

PROGRESS ON 34051

I visited the Mid Hants Railway at Ropley recently to see progress on 34051 *Winston Churchill*. She is now indoors – actually, in the wheel-drop shed – and has had her front bogie removed for better access to the front frames and centre cylinder area.

Work is in progress to clean down the frames and wheels in readiness for repainting. As you can imagine, this is not a pleasant task, but has to be done.

The worst-corroded cladding panels have been removed and new metal welded in to replace the corroded bits. New cylinder covers have been made, but keeping the old central inspection panels. The sand-box covers have been cleaned and now open and close as they should. Cab parts have been removed and refurbished in advance of cleaning and painting the backhead. The tender vacuum tanks have been removed, needle gunned and

repainted. Their cover has been substantially rebuilt and painted.

Once all the "little bits" have been done, the loco and tender will be repainted together so as to make sure there are no colour differences between paint batches.

I was greatly impressed by the skills and enthusiasm of the two young men – Alex and Ollie – who are doing much of the work. Alex is the "metal basher" and Ollie the painter. Their work is first class.

We are giving the MHR a framed print of "The ACE at Battledown" in recognition of their efforts on our behalf. A number of members said that they would like to see the work for themselves. I have therefore arranged a visit to Ropley on Wednesday 22nd January, with the presentation starting at 11:30. If you would like to come, please let me know.

Ian Harrison

FOR CURRENT LIST OF FORTHCOMING LECTURES

See the Diary section of the web page at:

<http://www.nrmfriends-south.org.uk/Diary.html>

**FOR CONTACTS IN FNRM SOUTH OF ENGLAND
GROUP:**

See Contacts at main index:

<http://www.nrmfriends-south.org.uk/index.html>