



The Friends of the National Railway Museum

Briefing 65

South of England Group

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Vice Presidents – Alan Pegler OBE, FRSA; Sir William McAlpine Bt., FRSE, FCIT, FRSA

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OBITUARY: ALAN PEGLER

You will probably have seen that the Group's Senior Vice-President, Alan Pegler OBE, FRSA died on Sunday 18th March, aged 91. Alan had a long association with the South of England Group. We appointed him a Vice-President of our Group due to his key role in the preservation movement - not only N^o 4472 *Flying Scotsman* but also the Ffestiniog Railway, which he helped to rescue. Many of you will have met and talked to him and everyone who did so came away with a respect for his enthusiasm.

He spoke to the Group on 23rd September 1996 when he reminisced about his interest in railways. This started when he saw N^o 4472 at the British Empire Exhibition in 1923 leading to a life-long association with the engine. Despite it being instrumental in his own financial downfall, he always had a deep love for it and was always keen to see it working on the main-line. A summary of his talk appeared in Briefing N^o 7 and is available on the Archive CD which was distributed

last year.

Following his talk, at our fifth AGM in January 1997, he accepted the request that he become a Vice-President alongside Captain Bill Smith RNVR. So this was to be Alan's 15th year serving in that office.

Most members will be aware that in the last few years, Alan was confined to a wheelchair. However, that didn't prevent him from taking part in events, including regular visits to the Ffestiniog Railway. On 16th May 2009, he was present at the unveiling of "Bill's engine" GNR J52, N^o 1247, following its repaint at NRM Locomotion, Shildon - demonstrating his association with the South of England Group, and Bill. Peter Townend, who was also present at the event, was instrumental in both Bill and Alan acquiring their respective locomotives when he was shed-master at Kings Cross. That was the last time many of us saw Alan. He will be sadly missed.

See centre pages for some photographs and more on Alan.

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150 YEARS OF LONDON UNDERGROUND

On 13th February, we welcomed Oliver Green, past head curator of the London Transport Museum and Barry Le Jeun, Chairman of the Friends of the LTM. Oliver gave a presentation on the growth of London's transport infrastructure over the last century and a half, with a particular emphasis on the underground railway system – a system which now handles 1 billion passenger journeys per year, more than all the rest of the UK's railways put together.

The story started in the first few decades of the 19th century, a period of rapid expansion of London and much disruption, as the main-line railways brought their lines to the then boundaries of the city. They were prevented from going further both by the costs and the disapproval of Parliamentary and the City Fathers. The resulting chaotic horse-drawn intra-city transport was illustrated in contemporary cartoons.

The solution was championed by Mr Pearson, Solicitor to the City of London, who established the Metropolitan Company in 1860. Although he didn't live to see it completed, he recruited John Fowler as engineer, who used the tried and trusted cut-and-cover technique to build the line under the main roads - tunnelling was only used in penetrating the rising land under Mount Pleasant. The line was completed in an astonishing two years, with only one serious accident when the Fleet sewer broke through between Kings Cross and Farringdon. Oliver showed some original photographs of Kings Cross taken at the time. Noticeable by its absence was St Pancras Hotel and Station – not due to arrive for another five years. Only Baker Street and Gower Street stations were fully enclosed, all the others were built as miniature mainline stations with overall glass roofs on iron framework. The line

opened on 10th January 1863 and proved an immediate success. The only real problem was the smoke. Trials of a fireless locomotive, which used pre-heated hot bricks to boil water, proved unsuccessful. This prototype became known as "Fowler's Ghost". The GWR leased the company more traditional locomotives for the opening of the line. The GNR provided a further stop-gap before their own locos arrived. These came from Beyer-Peacock of Manchester. The engines were powerful, well able to handle the rapid acceleration and braking. They had condensing apparatus which wasn't too successful and for much of the time they worked without it. The result was stifling, damp smoke throughout the system. Most worked to the end of steam on the inner city lines in 1905, when they went to the outer-suburban services. Only N^o 23 still survives, having been banished to the Brill branch.

Meanwhile the Metropolitan-District company had started building the southern part of the system along the Embankment. It is a myth that this project showed how good the Victorians were at coordinating big public works. In fact it was only after the great London engineer Joseph Bazalgette had completed the sewer under the Thames Embankment that the company came along and dug it up to build their line. The first part was opened in 1868 but the north and south parts were not joined up to form the Circle until the late 1880s.

By the end of the 19th century the first Tube lines were making an appearance. The City and South London was the first, opening in 1890 and running from Stockwell to Monument. Its construction, and those which followed, were made possible by the invention of the tunnelling shield by James Henry Greathead. Building the line was one thing but what

which the government was pushing at one time. The government has now swung to the opposite extreme and insisted that no-one can get on their apprenticeship programmes without GCSEs. Pete believes that good quality apprenticeships should be open to anyone who is serious about learning and can stick the course. As an example he described how he was challenged, about 3 years ago, to start a scheme for the long-term unemployed under 25s, which he did. As part of this, he was asked if he would take a young woman who was about to go to prison unless she found herself a placement. She said she was interested in becoming an engineer, so he got her to promise that she would stick with the apprenticeship, and not miss more than two consecutive days at college. She is now in her third year, and Pete is proud of her. She is passionate about engineering, Although normally taciturn, she opened up and wouldn't stop speaking during a recent visit by Prince Charles. The same enthusiasm permeates all his people. During a recent cold-snap, they only had a few minutes lost time, even though they are working in the open or in unheated premises.

The costs of running steam locomotives and repairing them are astronomical and even the wealthiest individual will find it impossible to run as a hobby. As an example, he pointed to the BR Standards. *Britannia* recently required a new upper firebox. The special arsenitic copper is only available from Taiwan and only one mill in Europe can roll the supplied ingots. Those ingots alone cost £200k. The rest of the boiler is made up of patches on patches and also needed replacing. He pointed out that most of the BR Standards which come through his works are in the same state. BR made them for an anticipated lifetime of about 20 years, and here we are some 60 years

later still trying to run them. In the works at present are four BR Standards all having brand new boilers fitted.

Making a taper-boiler is not easy, especially as these days the specialist presses are not available. Much has to be made by hand using hammers and blow-torches. To make a back-plate will cost about £18k to £20k and to restore the complete engine somewhere between £750k and £1.5M. It is not surprising, with these costs and in tight economic times, that there is an ever increasing line of engines awaiting heavy repair on the preserved lines.

Building new locomotives is not necessarily the answer. *Tornado*, for example, cost £4M; money which reduced the amounts available for restoration of other engines. In addition the new boiler in *Tornado* has had its problems, so the question of better boiler sources still remains.

In questions, Pete covered the access of steam locomotives to the national railway network. He believes this will gradually concentrate on a few secondary lines due to capacity constraints on the main lines. There were questions about locomotive repair; Pete pointing to the difficulties of sourcing forgings in the UK, and of the question of whether to replace original, and so potentially historic, components. The answer was if it is to run it must be safe, so replacement is usually the better option. His main theme though, remained that locomotive repair must be run as a sustainable business. He finished on the essential component – people. He paid tribute to those who knew about, and ran, BR in the steam days, such as an 80 year old fireman who visited *Flying Scotsman's* footplate, and the last Crewe Premium Apprentice who sadly died at the very moment the regulator was re-opened for the first time on the restored Super-D.

THE WATERMAN RAILWAY HERITAGE TRUST

We were honoured to welcome Pete Waterman to the Group's meeting on 12th March. Pete kept the packed audience enthralled as he spoke for some 80 minutes without any visual aids.

Pete was born in 1947 during the deepest snowfalls in history – he was sure there was a Super-D passing by! He came from a working class background and had always had an interest in railways; while everyone at school was swatting, he was spotting numbers. Although he was a member of Coventry Cathedral choir, the new Cathedral hadn't been built at the time! But that got him into music and meant the school needed him for the choir, despite his bunking-off train spotting. He was determined to join the railways after school, but he got there by a strange route - he was hauled before "the beak" for dealing in stolen goods, although he didn't know the railway shed and loco plates were stolen. He was sent, by way of probation, to Wolverhampton shed to make the tea for the lads. It must have been good tea because they offered him a job at the end. Soon after this, his music career took off. What little time he had available he spent in making 7mm model locomotives. BR got to know of his interest and regularly used to approach him to ask if he wanted to buy a redundant diesel. They would then overhaul and send it wherever he wanted. That's how he came by his collection of diesel locos. When BR asked whether he would buy an electric loco, he approached the NRM to see if they wanted one of each of the first five electrics, classes 81-85. While ground-breaking in UK terms, they were crude by modern standards. The NRM were not interested, so he bought them for storage at Crewe.

One day he had a bit of spare time during a stop-over at Bristol, so he went to

Minehead, a location he knew well from his boyhood holidays, and came across the West Somerset Railway running steam engines. He thought he ought to have one to add to his collection of diesel and electrics. The trigger came when the Orient Express approached him to see if they could buy one of his Class 55s. He agreed, on condition they bought him a steam loco in return. The result was that he became the owner of GWR N° 5224. By then he had his railway maintenance company, which could handle all the moving parts; but the problem was the boiler. Boiler skills were in short supply, and getting scarcer by the year. His view is that locomotive repair must be considered as a sustainable business, not as a hobby. He realised that the solution was to start an apprenticeship, so he advertised for men over 55 who had worked on steam loco building and repair. He got 10 applicants and matched these with 10 young apprentices. Together they took the engine apart and immediately saw the corrosion in the boiler. His senior boilermaker initially said they would patch it up, as BR used to. However, Pete asked what the GWR would have done had they come across such a problem in 1939. The answer was that they would have supplied a new boiler. To an accountant this was just overkill, but to Pete, as the "responsible person" in the business, this was the proper way to ensure that the engine would be safe, especially as tests and regulations are becoming much stricter.

Now he has over 30 apprentices on his books. All are taking NVQs as part of their training. There is a steady flow of work through the workshops, so much so, that they don't have enough apprentices. He is keen to point out that his apprenticeships are real ones, not the 6-week work experience "apprentices"

should power the trains? Steam haulage was out of the question in the deep tunnels. British experience with cable haulage was not positive; the first such line in London, the Highgate Line, went bankrupt. Ultimately, electric traction was chosen, the contract going to Hopkins Brothers who had a licence from Thomas Edison's company. The trains were assembled by Beyer Peacock and were formed of a locomotive and 3 carriages. Despite Punch satirising it as the "Sardine Line" and the carriages being colloquially referred to as "padded cells", the line was a success. The technology was so cutting edge that, following a visit to the Stockwell power station, H.G. Wells wrote his novel "Lord of the Dynamos". However, the locomotives were underpowered and there was insufficient generating capacity to power them and the other ancillaries, such as station lighting which remained gas fuelled.

The next Tube was the Central Line. They were the first company to introduce multiple units. Their advertising was aimed to pacify the travelling public and "avoid anxiety" over all the new technology. They pitched their service at men commuting into the City and also women paying visits to the Central London shops and theatres.

Then came one of the most controversial characters – C.T. Yerkes. He was a US entrepreneur who developed the electrified elevated lines in Chicago. Following some shady deals over there he moved over here and developed the London Tube system. He set up a system of main and subsidiary companies, persuading banks to invest in a selection of the latter. This gave him great freedom to move money between the various companies, enabling the projects to go ahead. The first was the building of the Lots Road power station in Chelsea. He started the building of the Piccadilly,

Hampstead (Northern) and Bakerloo lines, but died in 1905 before these were complete. By then he had bought up the District Line and standardised on the 4-rail system of running lines we know today. In 1908 the company issued its first branded "Underground" map.

Subsequently, Albert Stanley (later Lord Ashfield) and Frank Pick were the "formidable pair" who further developed the system. George Gibb had replaced Yerkes as Chairman and Managing Director on loan from the North Eastern Railway. He recruited Pick from the NER to head the marketing side. Stanley replaced Gibb and pushed ahead with substantial investments. In the early 1920s, the pair used a variation of the Metroland idea developed by the separate Metropolitan Company. Stanley and Pick put forward a proposal to the government to build "homes fit for heroes" next to lines they would build, all financed by government guarantees. As a result, the City and South London expanded and joined the rest of the system as the Northern Line. In 1928 Piccadilly Circus station was rebuilt and was so impressive that, when a Russian delegation visited, they convinced Khrushchev, then party-leader for the Moscow Metro, that they must have a system bigger and better! The Piccadilly Line was extended north and west with newly-designed, standardised stations, many forming integrated transport centres with the Company's buses.

With nearly 60 stations on the system, it was getting difficult to find one's way round, so Harry Beck's geometric route map, produced at this time after two year's of development, was a real boon. The decade ended with the introduction of the 1938 Tube stock and the second world war, the former setting the standard layout for all subsequent designs, and the latter putting a temporary stop to any further

development while Londoners took shelter in “their” Tube. Many government bodies also took shelter there, including the regional defence and control centre. At the end of the war the planned extensions to the Central and Northern Lines were only partly completed. The next major extension was the mid-1960s Victoria Line. The following decade saw the extension of the Piccadilly Line to Heathrow and the start on the expansion of the Jubilee Line. We have since seen the re-invigoration of East London catalysed by the Docklands Light Railway. While not part of London Transport, the next decade will see the completion of Crossrail; so it is clear that the period of railway construction in London is nowhere near an end. Together with the current director and head curator of the LTM, Oliver is co-authoring a book on the history of London Transport for publication this Autumn in preparation for next year's celebrations. The celebrations will start in January 2013, although the full programme still awaits confirmation. Barry then gave a short over-view of the Friends of the London Transport

Museum. They currently have some 2500 members and are active in funding various restoration projects, including the Q-Stock at Acton, and a 1897 coach being rebuilt at Boston Lodge. The latter should be ready for the celebrations next year. They also have several bus restoration projects in hand, including one to rebuild a B-Type bus in the form used to ferry troops to the First World War front line. Funding comes from subscriptions and from sale of redundant items recovered from London Transport, for example old signs. These are first offered to the Museum with any surplus going for sale by the Friends. The Friends also occasionally buy items which the Museum needs to fill a gap. Volunteers from the Friends act as coordinators and guides at some of the open days, e.g. at Acton and Aldwych, including the operation of the miniature railway at the former. Members also take part in visits and help out at the Museum, e.g. cataloguing the collection of documents. We aim to hold some joint events between the FLTM and FNRM-SoE Group in the coming months.

SUMMER DAY OUTING

Each alternate year we have a one-day summer outing for Friends in the South. This year we propose to visit the Romney, Hythe & Dymchurch Railway. The date is 29th September. This will be their Vintage Gala Weekend with an intensive railway service, the museum and model railway operating at New Romney and a selection of trade stands. We are not making special arrangements for the travel, since everyone has different requirements and concessions. For those coming from Central London, the best route is via HS1 from St Pancras to Folkstone, then bus 101 or 102 from the bus station (about 5 minutes walk away)

to Hythe. Please purchase your own ticket for travel on the RH&DR. A full day rover costs £13 for senior/ group/ concessions. Those taking the bus from Folkstone can get a £2 discount on the bus fare by asking for a combined return bus and RH&DR rover ticket. The aim is to meet at New Romney station at around 12:30 for lunch in the cafeteria there. Although there is no need to book anything in advance, Les Butler, who is coordinating this, would be grateful if you would let him know if you intend to join the trip, so he can keep the RH&DR informed of numbers.

MEMORIES OF ALAN PEGLER



Alan as he would like to be remembered, on the running plate of the “Old Lady” at Kings Cross 14th January 1963. This was the locomotive's final run on the 1:15 pm to Leeds just after the announcement that Alan had bought it – hence the crowds on the platform. [Photo taken from the FNRM book on *Flying Scotsman*]. Alan subsequently organised to have the locomotive overhauled at Doncaster and out-shopped in apple-green livery more like its original LNER form. Attached to a double tender, it was then used for some extended running on main-lines in UK, before moving to the USA to support a trade mission. It was here that Alan lost all of his money, resulting in him having to work his passage home.



Alan with our Chairman Ian Harrison, taken in front of J52 N° 1247. The engine had just been unveiled in its GNR livery at *Locomotion*, Shildon on 16th May 2009. This livery was the one preferred by our late vice-president, Captain Bill Smith RNVR, and the re-painting was sponsored by the South of England Group.

OUTREACH

The stand visited the East Bedfordshire Model Railway Exhibition on 11th February. It was coldest day of the year according to the Met Office, resulting in lower attendances than previous years. Despite this we had a busy time. Our second event was the London Festival of Railway Modelling at Alexandra Palace. This is always busy weekend and this year was no exception despite being the warmest March days on record. Sunday was a little slow to get going, probably due to the clocks having

gone forward. However our stand was packed most of the time. With Railfest and the problems over *Flying Scotsman*, we had plenty of questions to answer. We were also grateful to Bachmann who loaned us the prototype of the next planned NRM-exclusive OO model, of *Butler Henderson*. Keep an eye out for its release. Out next events will be at the South West Hertfordshire Model Railway Exhibition at Bushey on 12th May, and Trains at Trinty, Biggleswade on 16th June.