

Marlow & District
Railway Society

THE MARLOW DONKEY NO 26

MARCH 1983

CHAIRMAN'S NOTES

It was in 1970 that BR with almost indecent haste removed the track connecting Bourne End with High Wycombe, announcing to local rail users that there was a perfectly adequate bus service. Realising the threat to the remaining line from Maidenhead to Bourne End and Marlow an association was formed in 1972. A local councillor, Maurice Oram, chaired this group to be known as the Marlow/Maidenhead Passengers's Association. Over the past ten years the MMPA has worked hard to keep the line open and to improve the system wherever possible.

On 19 February 1983 the Association celebrated its tenth birthday. BR's new dmu, the 210, operated the branch for the day and a Transport Exhibition was held in the Bourne End Community Centre. Our own Society was invited to provide a stand. This work was undertaken by Alan Wheeler and an excellent display resulted. Alan and his helpers exhibited a collection of relevant railwayana of great interest to the general public which was shown by the crowd around it all day.

Publication of the Serpell report on BR's finances raised the blood pressure of many MPs. Interested members of the general public were equally amazed. One of the several options put forward suggested the closure of 85 per cent of our rail network - no lines north of Glasgow or west of Cardiff! Dr Beeching's trimming of the railway system paled by comparison. Revenue last year was barely half the cost of operating the railways - the government had to make good the deficit. The railways now have a mere 10 per cent of the total transport market, the remaining 90 per cent pours along our polluted motorways. Our wish to keep the railways running is not just nostalgia. Surely one driver in charge of goods equivalent to the combined loads of 50 lorries should make economic sense. The pollution from one diesel loco (none from an electric one) is far less than that from 50 lorry exhausts. Why we wonder when railways are prospering in Japan, Switzerland, France and Western Germany - even in Thailand - have our lines become so unprofitable and underused? Perhaps Jimmy ~~Saville~~ Saville should be transferred from tv advertisements to the BRB.

The sixtieth birthday of ex LNER 4472 Flying Scotsman was celebrated by a special run from Carnforth to Leeds, a 68 mile journey beautifully recorded by BBC tv. With so few LNER locos preserved after the destruction of the sixties it is gratifying to know that this particular old lady is being so lovingly cared for.

THURSDAY NIGHT PROGRAMME AT 1945 HRS for 2000HRS

- 17 Mar 1983 Clan Line. Talk by J Bellamy Chairman of the Merchant Navy Loco Society
- 21 Apr 1983 Lines from Marylebone Today. Talk by W E Slocombe, Operating Manager, Marylebone Area, London Midland Region.
- 19 May 1983 Severn Valley Railway. Talk by M J Draper, General Manager, Severn Valley Railway.
- 16 Jun 1983 Great Central Goodbye To be confirmed.
- 21 Jul 1983 Railway Magazine. Talk by J Slater, Editor of Railway Magazine. TO START AT 1930 HRS.
- 18 Aug 1983 Suggested is an evening trip by rail to either Windsor or Henley.

SUMMER FAMILY EXCURSION

Sunday 17 July 1983 by luxury coach to Severn Valley Railway. Cost Adults £6.00 OAP £5.00 Children £3.00. Details and bookings to Stan Verrinder.

PROJECTED TRIPS

Details are available from Roger Bowen of the Great Cockrow Railway and the Birmingham Museum of Science and Technology. If you are interested in forming and organising a party please see Roger.

GREAT CENTRAL RAIL TOURS

These tours conducted by your secretary will again operate in 1983. Confirmed dates are 21 May, 11 June, 9 July and 20 August. Details from BR LM Region or Keith's Coaches Aylesbury Tel Aylesbury 28686.

RAILWAYS IN THE FOREST OF DEAN

On Sunday 11 September to the Dean Forest Rail Centre at Norchaid and the preserved station at Tintern, with your secretary. Details from Keith Coaches, Aylesbury.

BRUNEL WEEKENDS

Two this year with your secretary. On 1 and 2 October between Exeter and Plymouth, staying in Plymouth. On 5 and 6 November between Reading and Bristol, staying in Bristol. Both weekends feature rail travel from London and Reading. Details from Kingdom Tours, 33 Kingsbury, Aylesbury, tel Aylesbury 33999.

CHILTERN TRAINS

A full programme is being operated in 1983. Details from Chiltern Trains, 13 Golden Hills, Chinnor, Oxon, OX9 4PT.

MARLOW MAIDENHEAD PASSENGERS ASSOCIATION

An excursion to York on 23 April. Details from Ernie Dove.

The realisation of BR's modernisation Plan, detailed by deliveries of new types of locos continued in the first quarter of 1958 with the delivery of the first of ten type "4" main-line diesel electric locos ordered from the English Electric Co. for the Eastern Region.

The locos, numbered D200 to D209 were of 2000 hp and in their equipment based on the first Nos 10000, 10001, 10201-3 built between 1947 and 1954. Unlike the first five, which had their mechanical parts built at the railway workshops at Derby and Ashford, the new ones were built at the Vulcan Foundry Ltd, Newton-le-Willows, Lancs, an associate company of EEC. Of 1-Co-Co-1 wheel arrangement the first five were intended for GE line services on principal expresses between Liverpool Street and Norwich.

At the other end of the scale the first of 22 prototype light-weight diesel railbuses due to undergo extensive trials on rural services was delivered. This was designed and built by AC Cars Ltd of Thames Ditton, Surrey, one of five manufacturers building them to the requirements of BTC. This particular vehicle was four wheeled, seated 46 and was powered by a 150 hp diesel engine supplied by British United Traction Ltd. It was intended for use on the Scottish Region.

Developments on the ground were proceeding apace too. In particular the modernisation of the Kent Coast mainline via Chatham and Faversham was under way. This included extensive track re-modelling and quadrupling, as well as the installation of third rail electrification for the first stage of the Kent Coast electrification scheme due for completion in 1959.

On the Eastern Region work was being undertaken on the Churchbury Loop between Edmonton and Cheshunt to improve travelling facilities to NE Middx. The line was originally opened in 1891 but passenger services were withdrawn long ago as 1909 due to the opening of the Metropolitan Electric Tramways route to Waltham Cross. The line was re-opened between 1915 and 1919 for the transport of munition workers but remained open for goods traffic. As part of the modernisation plan the line was being totally re-built for passenger traffic with electric services due to commence in 1960.

Closures featured in the period too, the most famous being the "Bluebell Line", closing on March 17 from East Grinstead to Lewes. Other closures were on 5 May when services were withdrawn Loftus and Whitby, West Cliff, NE Region, and between Bridgend and Nantymoel on the Western Region.

Loco withdrawals also took place, the most significant being the last Atlantic wheel arrangement loco No 32424 "Beachy Head" after hauling a special train from Victoria to Newhaven Harbour on 13 April. The loco was one of Earle Marsh's H2 Class built in 1911 at Brighton Works. A more modern loco to be withdrawn was the Metropolitan Vickers gas turbine loco No 18100 of Western Region.

For some time now the Editor has been threatening to double my contributions at meetings unless I produced a book review. If you like it, I'll do more.

EARLY RAILWAY PRINTS by Gareth Rees. Published by Phaidon ISBN 07148 2039 3
£11.95

When the Railways came their impact on Society was far greater than space travel today. These prints, eagerly snapped up at the time, provide a wonderful glimpse of the way the railway was so long ago. The 98 illustrations, 38 colour plates, give as much pleasure today as when originally published some 150 years ago. There are 11 of the G.W. - and you can see what the atmospheric railway looked like.

THE RAILWAY BARONS by David Mountfield. Published by W.W. Norton & Co. Inc.
ISBN 0 393 01325 1 - £10.

It was all very well to invent the railway but who paid for it and who actually built it - and how? The cost and organisation was enormous and unprecedented and new men with new ways, mostly dodgy, came forward but they got there in the end. This book deals at length, and not unkindly, with George Hudson. Thomas Brassey, who seems to have been an enlightened employer in a fairly grim era, shines like a beacon. Various American wheeler dealers have to be read about to be, reluctantly, believed in.

THE GREAT WAY WEST by David St. John Thomas. Published by David & Charles.
ISBN 07153 7063 4 - £4.50.

A panorama of history, scenery, topography and almost everything else required for the pleasure of nostalgia - and yet more on the atmospheric railway. Lots of information but more of an indulgence.

VICTORIAN LOCOMOTIVES by D. Baxter. Published by Moorland Pub. Co.
ISBN 0903485 62 1 - £5.50.

Photography came, fortunately, in the late 1800's and 129 Victorian photographs are included in this book with an informative text on the railway content of each one. Totally different from the impressions produced by prints, these are frozen moments of personal pride.

RAILWAY RELICS AND REGALIA Edited by P.B. Whitehouse. Published for "Country Life" by Hamlyn ISBN 0 600 37572 2 - £5.

This provides something I remember from long ago - a good read. Super colour and black and white in all chapters which include "Tickets and Passes", "Signs and Notices", "Carriage Panels", "Heraldry". Must stop now as I've got interested in "Cutlery, China and Glass".

Along with cowboys, red indians and Colt 45's, one of the most common images of the mid 19th Century West is of a classic 4-4-0 heading a train of settlers and pioneers to a new life, and probably straight into an ambush! Over 25,000 of these versatile workhorses were built and they served their owners for more than a century.

The earliest U.S. built locomotive dated from 1831 when a vertical boilered 0-4-0, "Best Friend of Charleston" went to work on the South Carolina Railroad. A year later, came "Brother Jonathan" for the Mohawk & Hudson Railroad. This was based on Stephenson's 2-2-0 "Planet" but introduced the front bogie, making it a 4-2-0, but had the driving axle behind the round topped firebox as in the Crampton design.

It was one Henry Campbell, engineer to the Philadelphia, Germanstown & Norriston Railroad, who first realised that by combining the coupled wheels of "Best Friend" with the leading bogie of "Brother Jonathon" a powerful, flexible locomotive would result. Campbell's design was made a reality by Philadelphia mechanic James Brooks (no relation to Brooks Locomotive Works of Dunkirk, New York) who in 1837 produced the world's first 4-4-0. This pioneer was unusual in the New World by having outside frames and inside cylinders with Gab gear. The boiler pressure was high for the period at 90psi when 50-60 psi was the norm. The resulting tractive effort, 4,373 lb, was three times that of contemporary 2-2-0 or 2-2-2's.

However, Campbell's 4-4-0 was not a complete success as it was not flexible enough to cope with the lightly laid American tracks because of the way in which the bogie was attached, by links from both side frames. This defect was recognised by Joseph Harrison, workshop foreman of Philadelphia locomotive builders Garrett & Eastwick, who, later in 1837, built a second 4-4-0 "Hercules" for Pennsylvania's Beaver Meadow Railroad. Again a boiler pressure of 90 psi was employed giving a tractive effort of 4,507 lbs. The boiler was low slung and had a tall haycock firebox like those seen on Norris or Bury locomotives like "Coppernob". The real breakthrough of this locomotive was in its suspension. For the first time the driving axles were connected by equalising beams and the bogie was centrally pivotted. This meant, in effect, that the locomotive sat on three points like a tripod and could therefore take up any irregularities in the track. With inside bar frames and outside cylinders with Gab gear the essentials of the classic design had arrived.

By 1848 the design was further refined. The famous builders, Norris of Philadelphia, had adopted the 4-4-0 layout as a development of their previous popular 2-4-0 locomotives. The haycock boiler remained but the large oil headlight and enormous chimney had appeared. The former was needed to illuminate the way on the largely unfenced tracks and warn others of its approach. The chimney was required because these locomotives were wood burners and the casings contained spark arresters. At first they were merely wide diameter tapering funnels but later all sorts of exotic diamond shapes appeared.

In 1852 Thomas Rogers of Patterson, New Jersey, introduced a standard production 4-4-0. It featured a flush, round top firebox, familiar in Britain, and had Stephenson's valve gear. Within a couple of years other manufacturers such as Baldwin, Grant, Brooks-Mason, Danforth and Hinkley began producing rival designs. Not only were all these locomotives all remarkably similar in their technical specifications, but all were very similar in appearance. The customer simply filled in a form stating which of the range of catalogued options were required and sat back and waited for a proven, reliable locomotive to arrive in a matter of weeks, just like buying an EMD diesel today! At the peak of the 4-4-0's popularity in the late 1850's early 1860's, most builders had them coming off the production lines at a rate of at least one a day!

Of all the 4-4-0's, the most famous is very typical. The Western & Atlantic Railroad received No.33 "General" from Rogers in 1855 and put it to work on its 5'0" gauge lines. Fame came at the height of the Civil War in 1862. At that time the W & ARR's 135 mile Atlanta to Chattanooga line was a vital link for the southern Confederate forces, which the rapidly advancing Union forces were determined to disrupt by destroying a long trestle bridge at Oostenabula. A Union force of twenty led by Captain Andrews, dressed as Confederates, caught a train at Marietta and at Big Shanty, 30 miles from Atlanta, they seized the train while the crew and passengers ate breakfast. The conductor, a man called Fullers, gave chase on a handcart, later changing to a private loco "Yonah". The Unionists intended cutting telegraph wires behind them and removing the odd rail. At each station they demanded immediate clearance in the name of Confederate General Beauregard. At Kingston they met a train coming the other way and had to wait for an hour and twenty minutes. As a result Fuller arrived only four minutes after "General" had left, he switched to another 4-4-0 "Texas" and resumed the chase. Now there was no time to cut wires or remove rails and so the Unionists had to carry on until after 87 miles and 8 hours "General" ground to a halt out of fuel. The raiders fled to the woods. "Texas" arrived, the Union group captured and seven senior men shot.

"General" later took part in Buster Keaton's film version of the event and both it and "Texas" survive to this date as oil burning standard gauge monuments.

Next in the 4-4-0 hall of fame comes the Union Pacific's 119 and Central Pacific's "Jupiter". On May 10th 1869 these two met, pilot to pilot, at Promontory Point on the eastern shore of Utah's Great Salt Lake and marked the completion of North America's first transcontinental. Although by-passed by the main line, Promontory Point is a National Monument and both "Jupiter" and "119" have been rebuilt for display. 119 was unusual in that it had a parallel, capped chimney. All three of these historic locomotives had the later "Wagon Top" semi-conical boiler.

In the US the heyday of the 4-4-0 was drawing to a close by 1880 as the 2-6-0, 4-6-0 and 4-4-2's were introduced to handle increasing loads. In Canada however the type remained the first line locomotives for a further decade. Canadian Pacific's transcontinental main line was almost completely operated by the type. These were built by several US builders and some by Dubs & Co. of Glasgow in 1882, one of which is preserved in working order at Winnipeg.

A few US 4-4-0's were constructed on into the 1890's for specialist duties. Of these one of the finest was the New York Central & Hudson River Railroad's 999 built in the railroads own West Albany shops early in 1893 for the prestige "Empire State Express" between New York and Buffalo. It stuck to the classic design but had 7'2" driving wheels for speed, and it was speed which brought 999 fame. On the evening of May 9th 1893 the conductor timed it at a speed of 102.8 mph over 5 miles and the following day it was claimed to have reached 112.5 mph! Whilst neither were independently proved, they were carried out and timed in a similar method to "City of Truro's" epic dash, eleven years later to the day. Later rebuilt with 6'7" wheels it is now in Chicago Museum of Science and Technology.

Among the last 4-4-0's were the Pennsylvania's D16 class built in the road's Altoona shops in the mid 1890's. Whilst following the well tried principles, they introduced some notable improvements. The boiler was much larger, superheated, tapered and combined with a square Belpaire firebox, a rarity in North America. The outside cylinders had piston valves operated by inside Stephenson's gear. There were two versions, The D16 with 5'8" wheels and the D16a with 6'8" wheels. The overall appearance was of an Americanised version of the GWR "County".

Those American 4-4-0's which survived into the 20th century changed in appearance. Conversion to coal or oil burning led to the replacement of spark arrestor stacks with plain stove pipes. The headlights shrank with improved efficiency and the pilots (cow-catchers) shrank as buckeye couplers replaced the replaced the old link and pin. Finally the elaborate finishes became plain economy black. Whilst most had been scrapped by the first war a few had remarkably long lives surviving until the fifties for branch line use. This was in itself remarkable as in North America locomotives were designed to last as long as their boilers unlike Britain where a locomotive would carry several boilers in its life.

Just about the last 4-4-0's in regular service were Canadian Pacific 29, 30, 136 and 144, all dating from 1883 - 87 which worked the lightly laid branch line between Norton and Chipman, New Brunswick, 44 miles. 65 and 75 lb rails and three frail bridges meant these veterans could cling to life but in October 1960 a fleet of small 500 hp diesel-hydraulics were delivered and the last steam hauled revenue services in Canada ceased using the same type that opened up the CPR! As a footnote, the replacing diesels lasted only ten years!