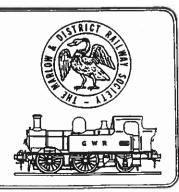
June 1994

# 



IN THIS ISSUE...

LONDON MUSEUMS
MAINTAINING THE HSTs
AMERICAN NARROW-GAUGE
ALL THE LATEST LOCAL NEWS



# The Quarterly magazine of the MARLOW & DISTRICT RAILWAY SOCIETY



### Number 70 - June 1994

# IN THIS ISSUE...

CONTENTS	Page 2
CHAIRMAN'S NOTES	Page 2
TIMETABLE	Page 3
SOCIETY NEWS	Page 3
MEMORY CORNER	Page 4
RAILWAY ROUNDABOUT Notes & News	Page 4
MAINTAINING THE GREAT WESTERN Mike Walker	Page 5
A CAPITAL ADVENTURE Tim Speechley	Page 9
NARROW GAUGE LAND Mike Walker	Page 10
BOOKSHELF Alan Costello	Page 16
25 YEARS AGO & 10 YEARS AGO Roger Bowen	Page 16
10 YEARS AGO Roger Bowen	Page 16

Sir witham McAipine De	
NT: Bas Woodward	
Mike Walker "Solgarth", Little Marlow, Marlow, Bucks	Tel: (0628) 483899 L SL7 3RS
AN & SECRETARY: Eddie Lewcock 27 Rupert Avenue, High Wycombe, Buck	
Peter Robins 95 Broom Hill, Cookham, Berks, SL6 9LJ	Tel: (0628) 527870
Tim Speechley 11 Rydal Way, High Wycombe, Bucks, H	Tel: (0494) 437428 PIO 8AX
Tony Caton 57 Hillside Road, Marlow, Bucks, SL7 3L	Tel: (0628) 473723 A
Mark Hopwood	Tel: (0628) 483487
Roger Wallis	Tel: (0628) 485463
Rob Young	Tel: (0628) 474649
Mark Hopwood 14 Beaumont Rise, Marlow, Bucks, SL7 I	Tel: (0628) 483487 EB
	Mike Walker "Solgarth", Little Marlow, Marlow, Bucks AN & SECRETARY: Eddie Lewcock 27 Rupert Avenue, High Wycombe, Buck Peter Robins 95 Broom Hill, Cookham, Berks. SL6 9L1 Tim Speechley 11 Rydal Way, High Wycombe, Bucks. H Tony Caton 57 Hillside Road, Marlow, Bucks. SL7 3L Mark Hopwood Roger Wallis Rob Young Mark Hopwood

# **CHAIRMAN'S NOTES**

I must start my column this time by praising Mark for the superb job he made of editing his first issue. Alright he had a few problems beyond his control on the copying front but the presentation, content and layout were first class. It was a pity we weren't able to fully appreciate the excellent computer scanned illustrations John Tuck had provided. Hopefully this will not be a problem in future as Tim Speechley and the Fiat Motor Co have come to our aid with assistance in the copying department at a cost which will not give the Treasurer sleepless nights or send your subscriptions rocketing in the manner currently predicted for train fares!

We must realise however that Mark, like myself and Stan before him, is merely the Editor of the magazine and not its sole originator. It is up to everyone of us to keep a flow of articles, news and pictures for him to use. After eight years in the job I know that motivating you can be the most difficult and frustrating part. We all of us have stories to share and the ability so to do, it just requires the putting aside of a little time and the application of effort.

During our recent trips out I've been struck by the way our members, particularly the more senior, start to reminisce about the old days. It's amazing to listen to the stories which are exchanged, any one of which would be an excellent foundation for an article. Alternatively, I know many of you have collections of photographs which you could share with us, and no doubt most would inspire stories and memories. PLEASE don't leave it to the other guy. If every member made the effort to write just one contribution Mark would have enough material 3-4 years so we're not asking for a large commitment from you all.

Recently I've had cause to be around or on the GW Mainline quite a bit and, as efficient and reliable as it may have become, it's one boring piece of property to watch. Apart from (I think) four 47 hauled InterCity's, all passenger trains are either HST's or the various varieties of Turbos. Freight continues to decline and appears to bring only three types of locomotive, 37's, 59's or 60's. The only other loco workings are the few parcels trains and the occasional PW trains which sometimes draw one of Old Oak Common's celebrity 47's.

Oh, how I hanker after the good old days of Kings, Castles and Halls or Westerns, Warships and Hymeks. Only a decade ago one could spend a few hours trackside and enjoy a parade of 31's, 37's, 47's, 50's, 56's, 59's, HST's and rich mix of conventional DMU's plus occasional rarer visitors such as 33's and Peaks. I realise that things were and are even more boring on Chiltern Lines

As I prepare these notes the Brave New World has been with us for a just over a month and, so far, little seems to have changed. The aim of BR managers to ensure a seamless transition seems to have been accomplished perfectly. Only time will tell how successful they will be. How will the various TOU's (Train Operating Units) fare financially? What will be the effect on fares and the levels of support from the taxpayer? Will anyone be willing to take on the franchises given the constraints on commercial decisions open to the operators in the final version of the Railways Act? We shall have to wait and see.

Amid much hulla-baloo and media coverage the Channel Tunnel has now been "opened" if not yet operational. An encouragingly large number of members have put their names down on the list for our Awayday to Paris which we hope can take place this autumn. In the meantime you may be wondering what it's like down there. Well I can tell you it is all an anti-climax. On 7th May I, along with several thousand others, got a preview of what it will be like when South Eastern TOU and Eurotunnel got together to run a shuttle service using 319 units between Sandling and a point 1% miles in from the English portal. I have to report that even in a 319 with the window vents open the ride was superbly smooth and remarkably quiet. It was possible to carry on a conversation in normal speech quite easily (in contrast to the total cacophony of sound and vibration as we passed through Sandgate tunnel on the mainline) and it bodes well for an almost unremarkable passage in Le Shuttle or Eurostar.

During my visit the whole place finally seemed to be coming to life at long last. BR and SNCF locos with loaded freight trains could be seen at Dollands Moor and the freight Shuttles could be watched from the hilltop loading and setting off for France. Only the Tourist Shuttles were absent. I was in the company of visitors from Australia and the US and it was good for once to be able to show off a genuine world beating British triumph. What a pity it will be many years yet before the final link, the New Kent Main Line, is open.

As a further part of these celebrations Folkestone suddenly became a very steamy town. 80079 and 80080 were working a series of shuttles up and down the 1in30 Harbour branch with a 9 car set of freshly painted maroon Mk1's. The result was stunning both visually and audibly! Also, Britannia (disguised as 70014 Iron Duke) ran down in daylight from Victoria with the Golden Arrow complete with all the traditional flags and regalia. What a pity then that the stock was the InterCity executive charcer train. Oh well, you can't have everything I suppose.

Have a good summer's gricing and I'll see you all in the autumn.



### **TIMETABLE**

### FORTHCOMING MEETINGS & EXCURSIONS

All meetings are held at the Royal British Legion, Station Approach, Marlow at 7.45 for 8.00 pm.

#### MEETINGS

Thurs 16 Jun SETTLE & CARLISLE John Birbeck

An in depth look at this famous and scenic piece of railway reminds us that

it's more than just a steam route.

Thurs 21 July MORE FROM COLOUR RAIL Ron White

Postponed from last November, Ron presents another selection of slides, narrated in his own irreverent style.

Thurs 15 Sep MORE FOOTPLATE TALES Wally Richards

Wally Richards was Traffic Manager at Slough for BR in the mid-1980s, but it is to speak about his days on the footplate that he returns to us on this

occasion. Not to be missed!

Thurs 20 Oct INTERCITY CREAT WESTERN IN THE 90's

John Cronin - Fleet Engineer ICGW This talk will be an excellent followto our recent visit to the HST Depot a St Philip's Marsh, Bristol (See Report

in this issue).

Thurs 17 Nov ASPECTS OF SIGNALLING Mike Hanscombe

Thurs 15 Dec CHRISTMAS BUFFET & SOCIAL

### VISITS

FOR BOOKINGS DIMEACT TONY CATON ON (0628) 47372

Sunday 10 Jul GREAT CENTRAL RATIWAY

Our summer coach trip takes us to the Great Central Railway which has made great strides in its efforts to replicate a main line. Cost: Adults

£12-00, Children £10-50.

Date TBA AWAYDAY TO PARIS

We are now on the EPS Waiting List and we hope to be able to make this trip late summer/early autumn. A waiting list of interested members is being kept, so we can go at short notice if this is necessary. If you're not on the

list, you may miss out!



# SOCIETY NEWS

#### NEW MEMBERS

We are pleased to be able to welcome Clive Robey of Marlow as another new member. We look forward to seeing him at forthcoming meetings.

#### MARLOW DONKEY

This is the second issue of the Donkey that I have edited. However, it is appropriate to offer some thanks to the following who all have made significent contributions to the production of this issue:

Mike Walker - For production of maps and a large written contribution.

John Tuck - For scanning the photographs to the excellent high quality we can see in this issue.

Tim Speechley - For kindly taking over the reproduction of the Marlow Donkey.

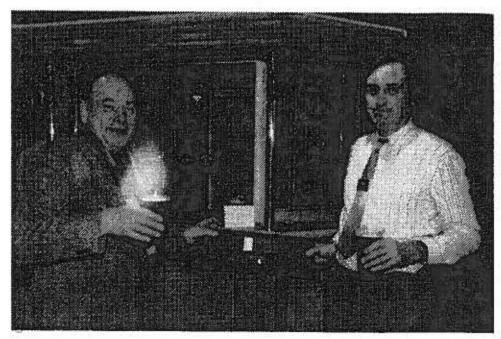
Once again, can I remind you that we are running low on suitable articles for publication. Any submissions are welcome. If you are planning any visits or holidays this summer with a railway theme, at home or abroad, please try and put some time aside to write up your own experiences.

#### FORGING LINKS

The last newsletter advised that we are keen to forge links with the Marlow, Maidenhead & District Model Railway Club. They meet every Monday evening and we are now exchanging news-letters.

### SOCIETY VISITS

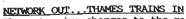
Two enjoyable visits to Kew/LT museum and St Philips March HST depot have been undertaken recently and full reports appear in this issue.



Stan Verrinder won the Norman Aston-Smith Trophy at the December AGM. Pictured here is our Chairman handing over the signal arm (Photo: A. Wheeler)

# **RAILWAY ROUNDABOUT**

### **NOTES & NEWS**



The extensive changes to the railways implemented on 1st April following the Railways Act have, of course, had implications locally. Network Southeast is no more and the BR double arrow is returning, for example on the 'London and South East' map. Services operated by the former NSE Thames & Chiltern division have now been divided into two Train Operating Units (TOUs). Thames Trains, based in Reading, operates to Paddington, Gatwick, Bedwyn, Basingstoke, Oxford, Stratford-upon-Avon and Worcester. It has taken over the Oxford - Worcester route from Regional Railways Central.

Chiltern Lines, based at Aylesbury, operates out of Marylebone, although services now extend to Birmingham Snow Hill.

hames



### OLD OAK COMMON COMPLEXITY

To give readers some idea of the complexity in the new railway organisation. Consider Old Oak Common depot, which two years ago was managed as one unit with one traincrew depot whose drivers worked freight, parcels Intercity and NSE. Now the depot site is owned by Railtrack and leased to Thames Trains but actually managed by three businesses. The factory and loco servicing area is now run by Trainload Freight (SouthEast), the carriage shed by Thames Trains for cleaning and stabling Class 165/166 Turbos and the HST shed is now run by InterCity Great Western for stabling and cleaning HSTS! Former Old Oak Traincrew are now divided into three separate depots at Acton (freight), Paddington (InterCity GW) and Old Oak Common (Thames Trains).

# STEAM FROM PADDINGTON

Steam returned to Paddington on Sunday 24 April when 6024 'King Edward I' hauled a special to Stratford-on-Avon and back to Didcot. There are no specific instructions forbidding this in the future, but the Heathrow Express engineering work means such specials will be difficult to path at weekends over the next couple of years.

#### HEATHROW PROGRESS

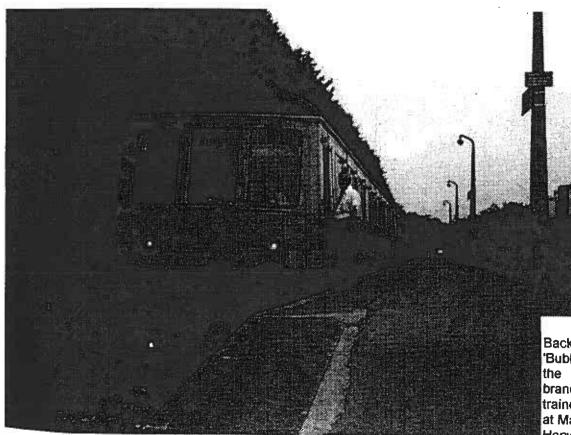
Anyone who has travelled by train up to Paddington lately will have noticed the extensive civil engineering works in hand for the BAA link to the UK's busiest airport. Work is quite advanced at the new Airport Junction, west of Hayes & Harlington station and continues at weekends through the summer. In order to reduce costs of replacement bus services, Langley Down Main Platform has been rebuilt to allow local services to call when the Relief lines are shut.

### RESIGNALLING ON GW ZONE

Railtrack GW Zone continue their work to resignal much of the Great Western main line. Slough New IECC complex will have its second position opened in September as the Acton West - Longfield resignalling occurs. Evidence of resignalling work is now visible as far west as Hanwell. Slough New IECC will take over the remaining area of Old Oak Common box which must soon close as it is in the secure Customs area of North Pole Channel Tunnel depot. Slough IECC has the capacity to eventually control the entire Paddington - Maidenhead section, although there are no plans at present to resignal beyond West Drayton.

Meanwhile Easter weekend saw the 'Big-Bang' at Didcot, with the main-line from Moreton Cutting to Challow coming under the control of another IECC - Swindon 'B'. This also includes the section from Didcot to Appleford.

# **MEMORY CORNER**



Back in 1986 the Class 121 'Bubble' Car & Trailer was the standard DMU on the branch. Here a Slough traincrew pose upon arrival at Marlow in 1986. (Photo: M Hopwood)

# MAINTAINING THE GREAT WESTERN

### Mike Walker

In recent years opportunities to visit BR depots have been rarer than hens teeth, so when the invitation came to inspect the HST base at St Phillips Marsh, Bristol, it was rather a surprise when members were rather slow in signing up. Never the less we had the full allotted party of twenty by the day, Saturday 14th May, and decided to go by train at a very attractive rate of £15.75 a head from Marlow. Our journey down was uneventful using the 08.10 from Marlow and the connecting service from Maidenhead to Reading where we had a lengthy wait for the 09.41 to Bristol. There's always something to see at Reading and today was no exception as 20901 and 20904 made a surprise appearance with the weed killing train - the Marlow branch could do with a visit. Despite warnings of possible delays in the Didcot area we drew up at Bristol Temple Meads two minutes early.

One of the advantages of going by train was that our hosts were even more welcoming. Depot Engineer Andy Cope awaited us on the platform and escorted us to the forecourt where a minibus was standing by to take the party to the depot. St Phillips Marsh is located on the Bristol Avoiding line built in 1892 which runs south of Temple Meads near the River Avon. The GWR had a steam shed here which had a larger allocation than its better known neighbour, Bath Road, near the station. The HST Depot was opened in 1975 and today is virtually the sole user of the line, as only the occasional special uses it as a through route.

Over coffee in the conference room, Andy Cope proceeded to explain the depot's role and how it functions. Our invitation had come from InterCity Great Western but now, as a shadow franchise, the business had become Great Western Trains. SPM is one of its two depots, the other is Plymouth Laira, and has under its wing Bath Road and Landore in Swansea. St Phillips Marsh can undertake nearly all work from refuelling to Level 4 overhauls and repainting. Only the heaviest overhauls are done elsewhere, although power car bogie and engine changes are done at Bath Road which has heavy lifting gear.

After nearly two decades of service it is easy to dismiss the HSTs. However, they have proved a magnificent investment, most power cars now have at least FOUR MILLION miles "on the clock" and some are approaching five million. These figures are being added to at a rate of 800-900 miles a day, six days a week!

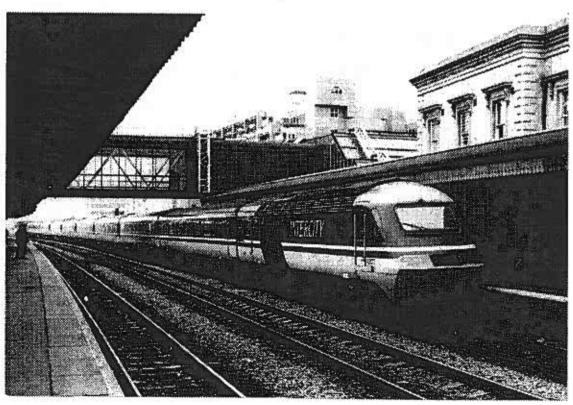
You may be forgiven for thinking they are getting a little knackered but the truth is they are now performing better than ever enabling Great Western to achieve 98% service reliability. To put this into context, the average Castle ran 1.75 - 2 million miles in around 35 years whilst the Westerns and Deltics achieved this sort of mileage in about fifteen years. In contrast the HSTs are expected to run for another 10-15 years yet by which time they will probably have run around eight million miles.

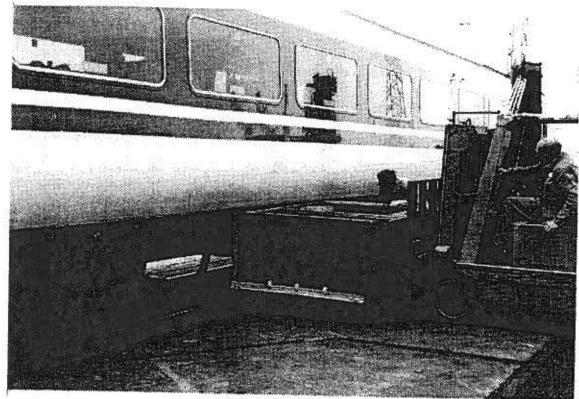
St Phillips Marsh has an allocation of seventeen sets, with 48 power cars and really comes alive at night when in a furious few hours eleven sets get various levels of examinations and up to nine more are "on shed" giving some interesting problems. The last set arrives about midnight whilst the first leaves just two and a half hours later.

Briefing over and donning regulation HV vests we ventured forth into the depot. An unexpected encounter was a rake of ten Mark ls, beautifully repainted in maroon for summer service on the West Highland line. We first visited the Depot Supervisor's office, the nerve centre of the depot. Here we were shown how defects which occur in service are logged and programmed into the maintenance schedules. Charts on the walls show the formation and status of every trailer set and power car. Unlike the early days the HSTs are now regarded as separate units with different maintenance schedules for the trailer and power cars which do not coincide.

Outside, in the shed, 43138 was available for inspection. First we went into the pit to examine the traction motors and gearboxes. Unlike earlier diesel electrics the HSTs do not have axle hung motors, rather they are mounted on the bogie frame. These gearboxes are one of the remaining trouble spots with HSTs. Indeed the No.3 gearbox on 43138 showed clear signs of an oil leak. Up in the cab we were treated to a demonstration of the ATP self test procedure. This is a recent innovation and the majority of the Great Western power cars, along with roughly three quarters of the Bristol and South Wales main line, are now ATP equipped. Even though the power car had been shut down for a couple of days servicing, the Paxman Valenta was still noticeably warm. It seems they try not to let them get cold as coolant leaks occur when restarted. The cooler group (radiators to you) are a critical part, their capacity is just adequate for hot weather and therefore they have to be free from blockages.

Pictured here at Reading is an HST Power Car at work on a GW Main Line service. (Photo: M. Walker)





While at St Phillips Marsh we were able to watch a module being changed on an HST Mk 3 carriage. (Photo: M. Walker)

On another track a trailer set was receiving attention. The air conditioning module was being changed using a forklift. Much of the equipment is maintained by replacing defective units which can then be repaired at leisure whilst the train is then out of service for the least possible time. We spent some time examining the BT10 bogie which has proved highly reliable. Mr Cope picked up a discarded brake pad. "These cost us £30 each". Cheap? Well, consider there are 176 on a train, that's nearly £10,600 and they last two to three weeks! Replacement at the right moment is critical. Too soon and it wastes money, too late and you are looking at scored discs and big bills.

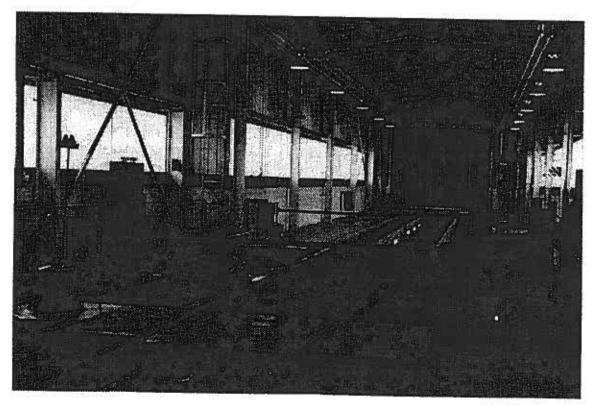
In today's new order, every cost is carefully monitored and allocated. St Phillips Marsh undertake some routine work for InterCity Cross Country. However, additional work will only be done after financial authority has been obtained from ICCC, who would normally do the work at their own depots. It's a bit like asking a garage to service your car for a certain price and being told additional work is required and being asked to authorise it.

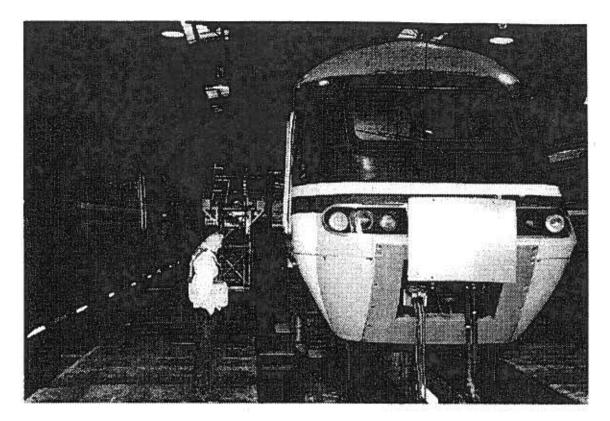
Next we visited the wheel lathe, which in addition to doing HSTs also keeps our Turbos in trim - another inter-company contract. The only place we were not allowed into was the paint shop. In view of the model in that week's 'Rail' I asked about livery changes. Nothing was confirmed, but something was definitely a foot - perhaps by the time you read this all will have been revealed.

Our tour took nearly two hours, almost twice the planned duration. Much enlightened, we thanked Andy Cope for his time and providing such an informative tour and we were transported back to Temple Meads.

Mark Hopwood had recommended we returned via Westbury and had selected the 14.31 Regional Railways service to Warminster as our transport. Your writer and several others were less than enthusiastic to find Pacer 143617 awaiting us on Platform 9. This glorified bus then set off waddling up the main line in total contrast to our down journey. Our stop at Keynsham was extended as the

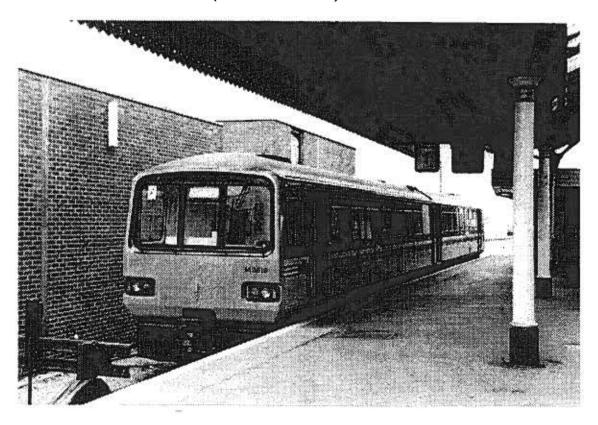
The quite new wheel lathe at SPM is empty in this shot. However, it is often busy with HSTs, as well as serving our local Turbo Trains. (Photo: M. Walker)





Society Vice-President Bas Woodward takes a close look at HST Power Car 43131 in the servicing shed. This Power Car is connected up to the Shore Electric Supply and air supply for brakes. This allows on-depot testing of all equipment on the Power Car without having to start up the Paxman engine. (Photo: Mike Walker)

This type of traction proved most unpopular with all M&DRS members on this trip. We are very lucky to have our Turbo units in the Thames area which are in a different world to these 'buses on wheels'. RR's 143619 stands at Bristol TM with a Severn Beach service. (Photo: Mike Walker)

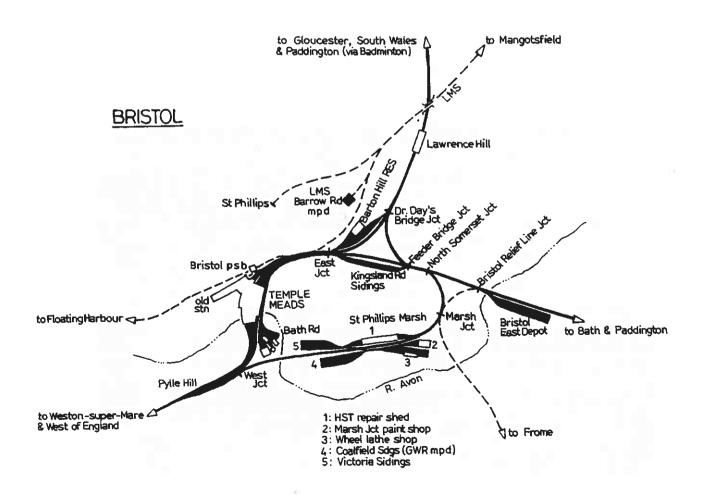


doors would not shut properly. In the end the Driver isolated the Traction Interlock System, but that meant it had to be taken out of service at Bath. Here Mark and Peter consulted timetables and TOPS terminal to offer us a choice, either catch the next train direct to Reading or a later service to Westbury and arrive home two hours late. After a democratic vote we elected for the latter, adjourning to the pub in the meantime. Our next train was a Cardiff to Portsmouth train formed of 158835, a considerable improvement, if a little crowded. I still question the wisdom of Regional's frequent, short train policy.

Westbury is a shadow of its old self and to make matters worse it was raining. A couple of scruffy Class 150s called but otherwise it was dead and depressing. Eventually an HST drew in from Penzance and we boarded, then explaining to Mark the significance and location of the Chocolate Poodle - one of the great landmarks of the old GW. IC and Thames don't connect well at Reading, so we had lengthy waits here and at Maidenhead. Mark and Peter decided to use their free passes to continue to Paddington and rejoin us at Maidenhead, but their train arrived without them. It seems engineering work at Ealing delayed the 125 and they saw their train pass by at Westbourne Park, so they got home three hours late!

The day was most enjoyable. Prize coconuts to Thames and Great Western, a wooden spoon to Rustic Railways! Special thanks to Mark and Peter for planning and doing the paperwork and of course to Andy Cope and his team for making it such a fascinating day. For those of you who missed it, or want to know more, John Cronin (Fleet Engineer, Bristol Traction Group, ICGW) will reveal all at the October meeting.





# A CAPITAL ADVENTURE

# Tim Speechley

Saturday 23 April dawned wet and dismal and not the best conditions for a society visit to London. Nine members participated, some coming from Marlow on the 08.10 train, the rest meeting at Bourne End station, where Travelcards to cover all journeys were purchased. After the recent buffer stop demolition incident it was interesting to note that the driver of the 165 unit stopped not only well short of the buffer stops, but also a considerable distance beyond the station building and canopy, thereby ensuring that all passengers (sorry! - read customers) got wet walking to their train.

165126 took us to Maidenhead unevently and there another 165 forming the 08.36 to Paddington was caught. Although fairly crowded, we all found seats and a rapid and relatively comfortable ride followed. I seldom travel by train and must say that the Turbo units do provide pleasant and rapid transport, though the seats are a little narrow even for someone of my stature.

As one who now bemoans the way the modern railway is becoming boring, I must say that the trip into the capital was full of interest. Part of the main lines were occupied by the Civil Engineers, who seemed to be demolishing signals. 37012 was present on a p.w. train — I well remember this loco in its earlier days working expresses from Liverpool Street. Acton Yard contained a plethora of diesels including classes 56, 59, 60 and a 47 seemingly newly repainted in Rail Blue livery. At North Pole, at least three of the Eurostar train sets were glimpsed through partly open depot doors and an electro-diesel was standing outside. Nearer the capital a 37 was seen pulling a train of refurbished London Underground stock.

At the terminus we waited briefly to see if any other independently travelling members would materialise but they did not, so we proceeded to the underground platform. Unfortunately, there appeared to be delays to the Circle Line services and, after a fairly long wait with the platform over-filling, we were advised to catch the next train to Edgware Road and to change there for a Hammersmith & City train. We then went to Kings Cross and changed to the Picadilly line (quite a trek) for Covent Garden.

Covent Garden is quite a deep station and is not equipped with escalators. Instead there are lifts. Naturally, it is a popular destination and after a train has disgorged most of its load, quite a large crowd develops waiting for the lifts. I spotted a sign saying 'Stairs' and another warning that there are 193 steps to the top. Undaunted by this and to the surprise of the rest of the group I set out alone on this journey of adventure. About half-way up I wished I hadn't and by the top I felt sure I shouldn't have. Despite the feeling that I had taken an age to reach daylight I still made it well in advance of the rest of them thereby giving sufficient time to recover from the acute panting and 140 pulse rate and to act normally. Incidently, I made it 192!

I am a Londoner by birth and spent many years commuting daily to the capital but this was the first time I had ever been to Covent Garden - not just the museum - any of it! What an admission.

The London Transport Museum is not very far from the tube station. Despite Alan Wheelers's reports of the chaotic situation there earlier in the year there appeared to be nothing untoward. My only complaint was that the building was hot.

We had a couple of hours to examine the exhibits - what you would expect really - trams, buses, trolleybuses, trains plus a vast number of models and audio-visual aids as well. Mike Walker and I both thought that the dummy people on the buses and trams and the fibre-glass horses "pulling" the horse tram were very well done. I had a go on a tube train driving simulator which was quite fun but after running through several red signals at high speed and then doing a "Bourne End" and stopping at a station with the rear of the train still in the

tunnel I fear I shall never make a good (train) driver.

To be honest I was surprised at just how much there was in the museum and I think it really needs longer than we were able to spend there.

After coffee we returned to Covent Garden tube where the lemming factor took over and all nine of the party decided to check whether there were 193 or 192 steps. Unfortunately, there were so many people coming up the stairs on this occasion that downward progress was made fairly difficult, but eventually we reformed on the platform and caught the Picadilly line one station where a change was made to the Central line. We travelled on new stock from thence to Bank and then progressed via the travelator to Waterloo & City Line.

Not being well up on these matters I was informed that this line had only just passed from Network SouthEast control to London Underground and the new units, virtually the same as the Central Line, certainly carried NSE livery but any sign of their ownership was lacking. The ride to Waterloo was interesting because the large windows in the ends of these new coaches really let you see just how tortuously twisty the line is - not the straight line you would imagine from the map.

Emerging from the darkness at Waterloo I was surprised at how bright and clean the terminus appeared, the effect being heightened by the fact that now the sun was out fully. We trooped down to the western end to see the new International terminal still at that stage unused. It is very modern and quite impressive. Our Chairman was at pains to point out the loudspeakers he designed for it. I still feel that it is a little unfortunate that the arrival point for our French visitors is named after perhaps their greatest defeat by the British. One wonders if the future St Pancras international terminal will be called London Agincourt, just to rub it in a little more.

Moving up to the departure board I was musing on the relatively unchanged appearance of the rest of Waterloo and thinking how nice a brace of Bullied Pacifics would look there when I suddenly became aware that the rest of the group had sort of disappeared. My eyes eventually spied that the next train to Kew Bridge was due to depart very soon so I quickly found the appropriate platform and train. I walked practically the whole length of the train, but could not see them so not wishing to go without them returned to the concourse.

Mild panic set in for a few minutes later when I was unable to locate them, but I presumed they had caught the now departed train and decided to make use of this enforced half-hour wait by partaking of luncheon. The burger I obtained from a well known outlet was certainly fast but less accurately described as food, the break allowed my mind to ponder on the derisive comments I was likely to receive when I finally teamed up with the group again.

Having checked the whole of the next train for M&DRS members without success I enjoyed a solitary ride to Kew Bridge via Clapham Junction and Barnes passing en-route the other Covent Garden with memories of happy times spent there in its days as 70A Nine Elms Depot. Anticipating being reunited with an anxious welcoming party, I was a little disappointed to find absolutely nobody waiting for me.

I walked the few hundred yards to the Kew Bridge museum and even there saw nobody. I bought my ticket and was hovering in the entrance lobby when I heard the familiar tones of the Walker approaching from outside. Everyone seemed pleased to see me and I was certainly relieved to see them. They had obviously been extremely concerned, I discovered, as they had felt constrained to visit a local hostelry in order to dilute their fears for me with medicinal liquids.

Upon entry into the museum proper we were all a little surprised to find that an exhibition of Meccano models was taking place. There was an amazing variety ranging from a Morris Minor 1000 through to large Army vehicles with working gearboxes and four wheel drive system, lots of fairground rides in miniature, a working model of the famous Wuppertal hanging monorail (the "Dangle-Bahn") and dozens of others. Perhaps the most impressive of all in terms of size was an enormous mobile crane which had a jib at least twenty feet long. The common factor—their builders must have an enormous amount of spare time to devote to creating these marvels of ingenuity. Much later I saw a lady leaving with a pushchair in which a young child clutched a box of "Junior Meccano". I wondered if she knew what she might be letting herself in for?

Needless to say we hadn't gone to see the Meccano models and the rest of our time was spent examining the stationary engines. Working were a vertical triple expansion engine and a horizontal compound whilst later in the afternoon one of the huge original Kew engines a beam engine dating from the 1840s - started to work. This is so large it can be observed from three floor levels and the smooth oscillation of the huge beam belies the power it transmits.

Outside the buildings there is a short length of 2' gauge track and a small diesel and an 0-4-0 ST were giving out and back rides to visitors. There is also a full size 0-6-0 ST undergoing restoration and a couple of steam rollers but these were not in operation.

There are not only steam engines at Kew and one of the most interesting sights was the starting procedure for a fairly ancient three cylinder stationary diesel which involved rotating the flywheel with a very long crowbar, interspersed with much fiddling with valve gear accessed by an eight foot high ladder! After what seemed like a full five minutes the beast suddenly picked up speed and roared into life.

All too soon it was time to leave - in fact two of the more "under the thumb" members (Messrs Caton and myself) were more keen to get home than some of the others and we formed an advance party to the No 65 bus stop outside. Although Armchair Travel's timetable indicated a nominal 10 minute interval service we were still standing there twenty minutes later when the rest of the party joined us!

Eventually our hopes were raised as a double decker turned the corner off the bridge only to be dashed upon realising that it terminated here at Kew. Fortunately another arrived shortly afterwards and despite being very well loaded we all managed to climb aboard. The journey to Ealing Broadway was quite exciting, our Driver obviously having graduated from the Nigel Mansell school. He didn't hit anything but it seemed more by luck than judgement. We repelled borders at Brentford, where the football ground was disgorging its crowd then lurched across the Great West Road and through Ealing finally terminating on the wrong side of the road opposite Broadway station.

From then on everything was plain sailing. We had only a short wait for our 165 back to Maidenhead and then quick connection onto the branch train. It had been a very interesting day. I can thoroughly recommend both museums to those members who did not come on this trip and, in my opinion, it is probably better not to try to do both in one day as you will miss much of the detail.

As a postscript, the next day I took my 10 year old son and his friend to Chessington World of Adventures and managed to lose them for quite a long time! Perhaps on future Society outings I had better be roped to a more alert member.

# **NARROW GAUGE LAND**

### Mike Walker

Colorado, one of the most beautiful places on earth, where the great plains meet the grandeur of the Rocky Mountains head on. Of its 103600 square miles, the lowest lying is almost a mile above sea level whilst its loftiest peaks reach more than 14000 feet into the clear blue sky. In winter it is a mecca for those who like to throw themselves down mountains upon two planks whilst the summer sees hoards of climbers, hikers and general tourists intent on taking in the breathtaking beauty of it all. Year round it is high on the "must do" list of rail enthusiasts from around the world. Fortunately the state is so large that there is plenty of room for everyone to get his or her own space far away from the masses and to enjoy stunning solitude.

To rail enthusiasts the state is primarily associated with two legendary "preserved" narrow gauge railways, the **Durango & Silverton** and the **Cumbres & Toltec Scenic**, but it also offers a wide variety of modern high performance standard gauge railroading in some dramatic locations. The two narrow gauge lines are but survivors of a once huge system of more than 3000 route miles built by competing and interconnecting companies which criss-crossed the state largely built to serve now defunct mining and logging industries.

### ORIGINS OF THE NARROW GAUGE

Narrow gauge was brought to Colorado and the USA in general by Gen. William Jackson Palmer a US Cavalry officer who had visited the Ffestiniog Railway and realised the potential of sub-standard gauge for bringing railways economically into mountain terrain. Returning to his homeland, he founded the Denver & Rio Grande Railroad to build south from newly founded Denver to the Mexican border and hopefully beyond, although things didn't go quite to plan! He chose a gauge of 3 feet as the FR's 1'11½" was considered too narrow for such a main line. We British enthusiasts tend to associate narrow gauge with the Little Railways of Wales, the Isle of Man or even lines such as the Hartzbahn in Germany. However, Colorado

narrow gauge is more like South Africa, a main line with the rails a bit too close together. Indeed most D&RG stock would be too large to run over BR whilst the big

2-8-2's which are the mainstay of today's D&SNG and C&TSR are as big and powerful as a Stanier 8F!

### FIGHTING TO BUILD

Palmer's railroad started building south from Denver in 1871 and soon reached Pueblo. Whilst Mexico remained the ultimate goal, a lengthy branch was proposed along the Arkansas River to serve the booming mines around Leadville in the heart of the mountains. As the D&RG built a rival appeared on the scene in the shape of the standard gauge Atchison Topeka & Santa Fe which was heading across south eastern Colorado and New Mexico en route to the Pacific coast. The Santa Fe considered New Mexico to be its own territory and took a very dim view of this narrow gauge interloper. As a result it decided to build its own lines from La Junta to Pueblo thence to Denver and Leadville. A few miles west of Pueblo lies the Royal Gorge, a deep cleft in the mountains just wide enough for the river and, with much blasting, one rail line. The race for the Gorge was on and became a shooting war between the two railroads both of whom built forts near to the gorge to protect their construction crews.

The Santa Fe got into the gorge first and in the end the two companies met around the table for peace talks. The result was that the D&RG agreed to abandon its goal of Mexico, building no further south than Espanola NM, whilst the Santa Fe agreed to withdraw from the Royal Gorge and hand its line over to the D&RG. Later, the D&RG would make it to the town of Santa Fe NM and its line from Denver to Pueblo became mixed gauge (later standard) and worked jointly with the Santa Fe line as a double track.

### A CHANGE OF DIRECTION

Denied access to Mexico, Palmer looked for new destinations for his slim rails and decided upon lines to Salt Lake City, Utah, and the rapidly booming mining district in the San Juan Mountains in the south west corner of Colorado. The former headed off to the west from Salida, roughly midway between Pueblo and Leadville, twisting and climbing over the 10856' Marshall Pass to reach the Gunnison River. This it followed through the Black Canyon - so called because the sun seldom shines in directly so deep and narrow is it - and thence by way of Montrose and Grand Junction to the Colorado River and state line. Here it met another Palmer road, the Rio Grande Western, which had built across the desert wastes of Utah. The San Juan Extension left the original Espanola line at Antonito and wriggled its way along the Colorado - New Mexico border for 171 miles, climbing to 10015' at Cumbres, to reach Durango. The final 45 mile stretch north to Silverton was finished in 1882.

Numerous branches were added by the D&RG or associated companies. Among the more important was a branch south of Montrose to Ridgway and Ouray finishing only a dozen or so miles from Silverton but separated by a massive mountain wall. In contrast a line from Mears Jct, west of Salida, to Alamosa on the Espanola line included a 53 mile dead straight section, the fifth longest in the nation and not what one expects from a narrow gauge mountain railroad. Indeed, the D&RG dug only two short tunnels on its original network. An independent company, the Rio Grande Southern built a line between Ridgeway and Durango via the 1025O' Lizard Head Pass avoiding the gap between Ouray and Silverton and completing what became known as the "Narrow Gauge Circle".

#### RIVALS MOVE IN

The D&RG did not have the region entirely to itself however for the Denver South Park & Pacific built south west from the city, along the South Platte River and, having crossed the D&RG at Nathrop and the Continental Divide, arrived at Gunnison. Apart from a couple of branches north of town, it finished here and never did fulfil the ambition of its title.

Meanwhile a standard gauge competitor, the Colorado Midland, had struck out west from Colorado Springs across the mountains headed for Salt Lake City. To meet this serious competition the D&RG extended its Leadville line over the 10239' Tennessee Pass and along the Eagle and Colorado Rivers to Grand Junction. This was a shorter and easier route than the original via Gunnison and very soon the entire new route from Pueblo all the way to Salt Lake City was rebuilt to standard gauge. Ironically the CM did not succeed and was abandoned in 1918.

### A LONG DECLINE

During the last decade of the 19th Century and first of this the D&RG converted much of its narrow gauge lines to standard until the slim rails were confined to the basic Narrow Gauge Circle (including the RGS) plus a few branches, most notably that to Monarch, west of Salida, which employed a double hairpin curve, double switchback and grades of lin22 to climb to 10148'. In total contrast the branch south from Durango to Farmington was built to standard gauge in 1905 in anticipation of conversion of the line from Antonito. When this failed to happen the Farmington branch was narrowed in 1923.

Also in 1923 the D&RG and the RGW having merged some years previously were reorganised and became the **Denver & Rio Grande** Western.

Although many smaller branches were closed as the mines and camps they served were abandoned and the DSP&P (by now part of the Colorado & Southern) gave up in the Thirties, the Narrow Gauge Circle remained intact until after World War 2. First break came in 1949 when the old Utah main line was abandoned west of Cimmaron followed by the northern half of the Valley Line between Alamosa and Mears Jct. The fabled RGS finally threw in the towel in 1951 after a lifetime of receiverships and extraordinary measures to ensure survival. By the mid fifties the rails had vanished from the Marshall Pass and the standard gauge had reached Monarch and Ridgway whilst the Alamosa to Antonito line received 3 rails and witnessed

unique mixed gauge trains.

By 1960 the narrow gauge was confined to the 246 miles from Alamosa to Silverton and the Farmington branch. The thrice weekly mixed train between Durango and Silverton was "discovered" by tourists and, whist rarely conveying freight, started running daily in the summer months. The discovery of oil and gas along the Colorado-New Mexico border brought welcome new business, loads of pipe and drilling equipment inbound, crude oil in tankers out. Even this traffic eventually dried up leading the D&RGW to abandon all but the Durango to Silverton section in 1968 and this was sold in 1981.

In some ways however this was merely the closing of one chapter in the story of the Narrow Gauge and the opening of another. The states of Colorado and New Mexico jointly purchased the most scenic section of the surviving line between Antonito and Chama, which includes the 100015' Cumbres Pass, along with a quantity of locomotives and stock. These would be leased to operators to form the Cumbres & Toltec Scenic Railroad, at 64 miles the longest "preserved" line in the world.

### THE NARROW GAUGE TODAY

To wander around the yard at Chama NM as the sun rises on a summer morning is to take a step back in time. Lines of gently weathered freight cars slumber in the sidings and a string of passenger cars rest alongside the traditional wooden depot. Presently, a cloud of steam billows from the engine house and from it emerges a large, squat, black 2-8-2. The Mikado moves gently down the yard until it comes to a halt beneath the wooden water tank amidst a stand of Cottonwood trees. Having slaked its thirst it prepares to move to the waiting passenger train. As it does so a second Mikado repeats the exercise, for the C&TSR is so difficult a line that even the 36000lbs TE of one K-36 is insufficient.

By 9.30 the public is starting to arrive and for a brief period the scene loses its timeless charm but at ten sharp, the engineers give two long blasts on the mournful, haunting whistles and the heavy train moves smartly out of town, allowing Chama to slumber once more.

Soon the train crosses the Chama River and enters a gorge known as The Narrows. The grade now steepens to a staggering 1in25 and the rails begin to twist and turn. A stop is made just before the Lobarto Trestle so the lead loco can be uncoupled and run ahead. The train follows. This is because the bridge will not support the weight of two locos at once. The climb continues, the locos throwing their exhausts high into the crystal clear skies in a cacophony of sound. So serpentine is the track that passengers enjoy an almost constant view of the power, often at right angles or more to the train!

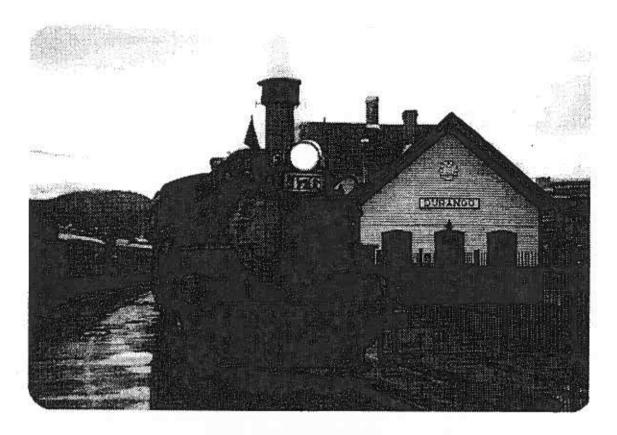
After rounding the aptly named Windy Point, an extinct volcanic core, the rails level out and the train comes to a stand at Cumbres. The lead loco is once more uncoupled and turns on the wye before returning to Chama.

Although the climb is over the C&TSR continues with its convolutions to keep the westbound grade to a more manageable 1in70. First it snakes around Tanglefoot Curve then makes a diversion 3 miles up a side valley only to return to a point just half a mile away but many feet lower. Finally after crossing another high trestle the line swings into a natural amphitheatre containing Osier station. Here the passengers alight to enjoy a traditional western barbe-que lunch whilst a second train arrives from the east.

### ACROSS LAVA AND THROUGH A GORGE

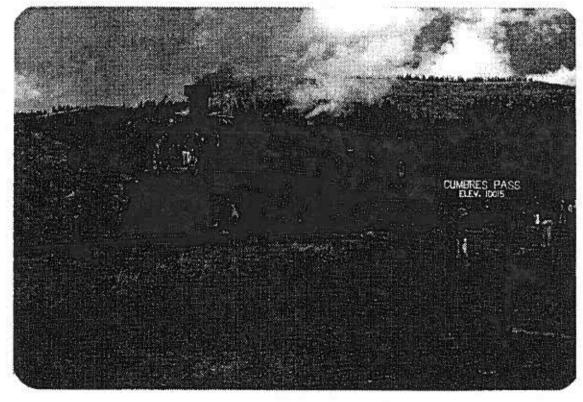
This train left Antonito around the same time the first left Chama but its journey has been less arduous. The westwards journey begins with a relatively straight dash across a broad mesa, volcanic lava beds now covered with thin scrub vegetation. Soon the hills begin and the line begins its windings once more and crosses from Colorado to New Mexico. Indeed it crosses the state line twelve times before Osier and once more between Cumbres and Chama!

Having wrapped around the tight hairpin at Lava Tank it encounters Whiplash Curve where two more hairpins and three adjacent levels of track help to gain altitude. After further convolutions and a pause



Former DRGW K-28 class 2-8-2 stands at Durango station on Silverton on from 2nd October 1981. Apart from security fence it is easy to imagine this is the pre-1949 "San Juan Ltd" awaiting a morning departure for Alamosa.

At an altitude of 10015 ft, Cumbres Pass is the highest point reached by steam traction in North America. 488, carrying a snow-plough which is equally useful for deflecting wandering cattle, passes by at the summit on 4th October 1981.



for water at Sublette the train pierces Mud Tunnel and enters the beautiful Toltec Gorge, winding its way around Phantom Curve where the major attraction are a number of rock columns, the cores of ancient volcanos whose cones have been eroded away.

The gorge is at its narrowest and most spectacular as the train emerges from Toltec Tunnel and onto a rock shelf some 600 feet above the stream on the gorge floor. Here also is a monument to President Garfield, word of whose assassination reached the San Juan Mountains around the time the first train polished these rails. From here it is but a short distance to Osier and lunch.

Although the trains and most of their passengers make daily round trips from Antonito or Chama to Osier the locomotives make one way through trips, exchanging trains at Osier. By prior arrangement passengers may do the same, the railroad will transport you the opposite way by road or you can make a two day excursion not easily forgotten.

### **DURANGO TO SILVERTON**

In contrast to the laid back approach of the C&TSR, first impressions

of the D&SNG can be off putting. The station, yards and loco shops at Durango are enclosed by high fences patrolled by guards who make on effort to conceal their firearms. The public is only admitted into this secure area when the train is ready for boarding. The reason? Simply to comply with insurance requirements.

Once aboard the genuine DRG narrow gauge cars (Those on the C&TSR are approximate replicas) things quickly look up as the train gets under way. First it threads the back streets of Durango, the largest town in southwest Colorado, then having crossed the Rio Animas for the first time, enters a broad valley with some 7½ miles of largely straight track. Above Hermosa the line starts to climb steeply and becomes decidedly serpentine once more. Approaching Rockwood the tracks come out onto a shelf above a lake. Spectacular, but only the overture for the splendours to come.

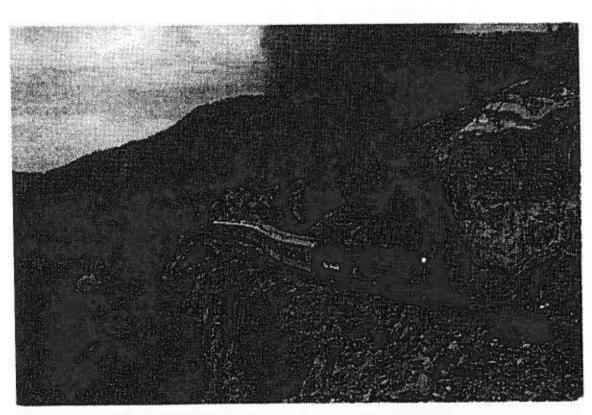
On leaving Rockwood the train passes through a short, deep cutting and emerges onto the High Line - the D&SNG's most famous landmark. This is a shelf cut into a sheer rock face over 400' above the Rio Animas. Whilst the drop isn't as high as the Toltec Gorge the shelf is much longer and includes a sharp right curve allowing passengers a clear view of their locomotive at right angles to most of the train. So precipitous was this canyon that construction crews had to be lowered on ropes 400' from the top of the cliff to place the charges which cut the shelf.

Once clear of the High Line the grade descends slightly to recross the river which it then follows for the next 25 miles with four further crossings en route. This section is at water level along the bottom of a deep winding canyon, overlooked by 13000' peaks and, with no other form of access, a tranquillity only minutely and briefly disturbed by the passing train.

Eventually the canyon opens out into a wide valley surrounded by more towering peaks. In its centre lies the old mining town of Silverton, now largely dependent on the tourists the railway brings for its meagre prosperity. The trains come to a stand at end of track, literally in the middle of a street lined with tradition western buildings which look like they came straight from a film set, only cars have replaced horses tied to the hitching rails along the boardwalks.

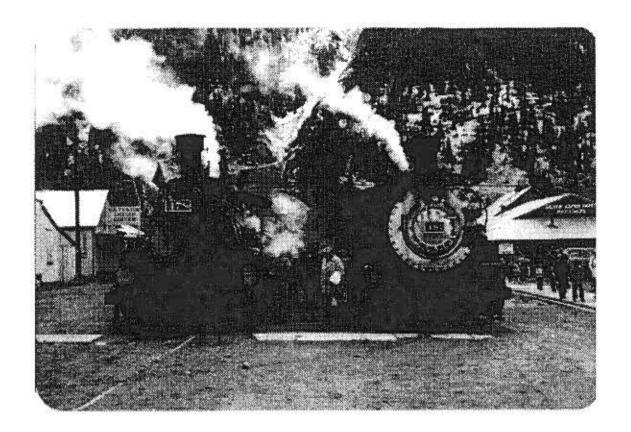
While the tourists adjourn to the many restaurants and gift shops, the railfans watch as the train backs a short way out of town to be turned on the wye and the returns to collect its passengers for the homeward journey. The D&SNG runs up to three round trips daily in the summer and each is a full day's excursion. On request they will drop you off in the canyon for a days quiet photography - working steam in one of its most noble theatres.

Both these surviving lines operate daily from May to late October with a restricted winter service on the D&SNG. In addition charter freights are occasionally run over Cumbres with an attention to period detail unmatched here. If you get a chance to experience steam in the high country don't miss it.



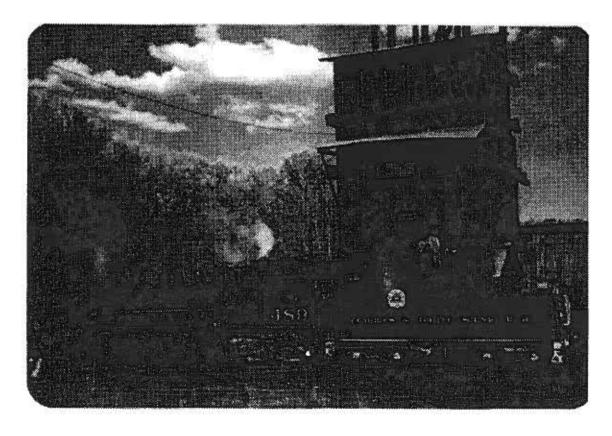
476, in DRGW days, ambles along the shelf track above Beaver Lake heading for Rockwood providing the passengers' with a scenic overture to the splendours still to come. (Photo: Mike Walker)

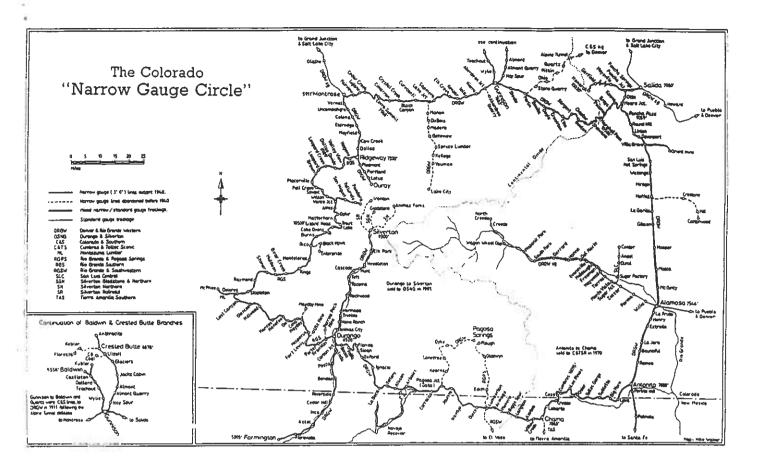
FRONT COVER PHOTO: This issue features Gordon Rippington's shot of 'Bahamas' at Dent Head framed by a barn. Winner of this year's photgraphic competition in the Colour Prints section.

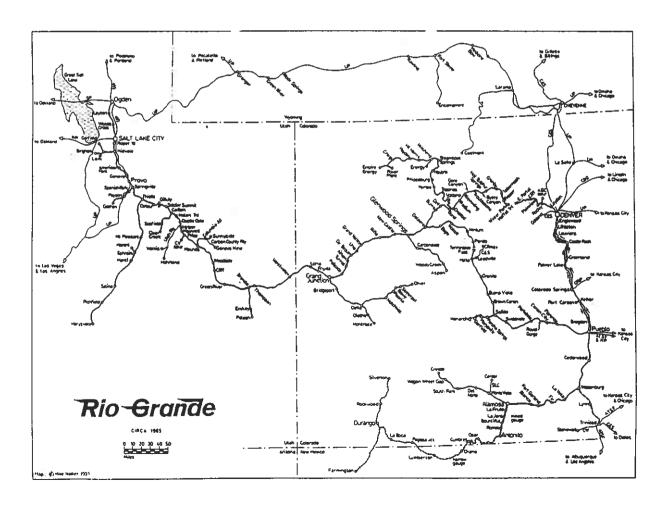


End of the track at Silvertown is quite literally in the street. On 2nd October 1981 K-28 478, built by ALCo in 1923, stands alongside Baldwin 1928 built K-36 481 whilst the passengers make for the restaurants and gift shops. (Photo: Mike Walker)

In a timeless scene - only the name on the tender has changed in 65 years - ex DRGW K-36 class 2-8-2 no. 489 is reflected at the Chana coaling tower on 4th October 1981. (Photo: Mike Walker)







### **BOOKSHELF**

Alan Costello

LONDON UNDERGROUND STATIONS

Ian Allen

David Leboff ISBN 0 7110 22267

For those who enjoyed the talk at the April meeting, this latest Ian Allen ABC provides some more interesting information on the Capital's underground system. Each station is listed alphabetically and details of the line it is on, number of passengers in 1993, its layout, history and design is given. Location of closed stations are given at the end of the book together with closing dates.

RATIROAD ATLAS OF NORTH AMERICA Mike Walker California and Nevada Steam Power Publishing UK ISBN 1 874745 02 1

While rail enthusiasts in the UK have always had a number of rail atlases available - no such publication has been produced for the USA until now. This is the second volume of a series that our Chairman has produced covering the whole of the country. Although covering only two states, it has taken eighteen months to produce, so Mike should be kept busy for some time to come

The normal scale is 1.25in:mile, but 0.5in:mile in city areas. Information supplied includes companies, mileage, detectors, Direct Traffic Control blocks of the Southern Pacific and Controlled Points of Union Pacific. An appendix lists all the Railroad Reporting and Identification marks and a complete index is provided. The only thing missing is the train times! A must for anyone proposing to travel by train in the area.

# **TWENTY-FIVE YEARS AGO**

#### Roger Bowen

In this day of extensive preserved railways it is salutary to read the editorial to the May 1969 Railway Magazine. This said "Although of the dozen or so schemes for preserving standard-gauge branch lines, only three are in operation while another one awaits the result of a Light Railway Order application and two have been abandoned, this seems to be no deterrent to the preservers, who are now turning to main lines". It then referred to schemes to purchase Stratford to Cheltenham, Carlisle - Hawick - Edinburgh and Leicester to Nottingham. The suggestion was that the "ridiculous steam ban" on BR was partly responsible and that if the steam ban were ever lifted that could remove their principle source of income.

And what of news:- the Dart valley Railway got its Light Railway Order on 1st April 1969. The official opening was by Lord Beeching on 21st May. The first of one hundred and eleven Mk 2b coaches was being delivered to the Western Region from the BR Workshops at Derby. These differed from previous Mk 2 vehicles in having wide wrap-round external doors.

On 5th May 1969 a notable monument to Victorian railway architecture, Manchester Central Station, closed. Opened by the Cheshire Lines Committee in 1880 the arch with a span of 210 feet and height of 90 feet is only rivalled by St Pancras.

### **TEN YEARS AGO**

### Roger Bowen

A coincidence? The 1984 trip like 1994 was to Loughborough for the Great Central Railway. Main articles were one by Eddie Lewcock on "Trading Water for Steam" - the story of boiler explosions in America. There was a note on a club steam excursion on the Settle & Carlisle which turned out to be diesel-hauled due to dry conditions. John Sears had an article on travels in



THE HISTORY OF THE SOUTHERN PACIFIC Bill Yenne Bison Books ISBN 0 86124 238  $\circlearrowleft$ 

This book recalls the history of the Southern Pacific Railroad from its formation in 1865 to 1985 (when it was due to merge with the Santa Fe, but that's another story). By the end of the last century the line connected the big cities in the west to Houston and New Orleans in the southeast. After taking over the Rock Island line in 1980 reached northwards to Kansas and St Louis. Not only does the company run trains, but during its time has run the ferries in San Francisco Bay, owned the third largest trucking business in the USA, 300 miles of pipelines and a large number of buildings. At its peak it had over 12000 miles of track.

BREAKTHROUGH Century Publishing Derek Wilson ISBN 0 7126 3983 7

As the Chunnel Tunnel may be open to some traffic by now, I looked for a book about it. At the time of writing I could only find some books published about seven years ago and this one. This is written on behalf of Eurotunnel just after the kink up of the tunnelling between England and France in 1990. There is a short history of the earlier attempts to tunnel under the channel, followed by details of the work that has now been completed, together with the problems encountered and how they were solved. No doubt there will be more books to follow detailing the problems encountered over the recent few years.



British railway manufacturers in 1969 were still exporting equipment to overseas countries; two 15 seat

luxury railcars were being supplied by D Wickham and Co Ltd of Ware, Herts to the Sabah State Railways, Malaysia; Electric multiple unit stock being supplied to Spanish National Railways by Metropolitan Cammell of Birmingham.

On 1st July 1969 in a little more than 3 hours eleven special trains were run on the single line between Bangor and Caernarvon in connection with the investiture of the Prince of Wales. Three of the specials, including the Royal Train, arrived from Euston, four from Cardiff and one from Crewe. The remainder, three 12-car DMUs replaced the local service on the North Wales Coast started at Chester and ran all stations to Caernarvon. Stabling was overcome by utilising a stretch of the former Caernarvon to Afm Wen branch, unused for four years. Prior to the event three special trains ran from Kensington to Bangor to bring 150 horses and their riders. These being the ceremonial troops for the investiture. How things have changed in 25 years!

North America in November 1974 (10 years ago, 10 years ago? Perhaps the Editor would like to repeat it) - perhaps we should ask our readers if they would like selected articles reprinted? All suggestions to Mr Editor for the next issue please - there's lots of good material here!