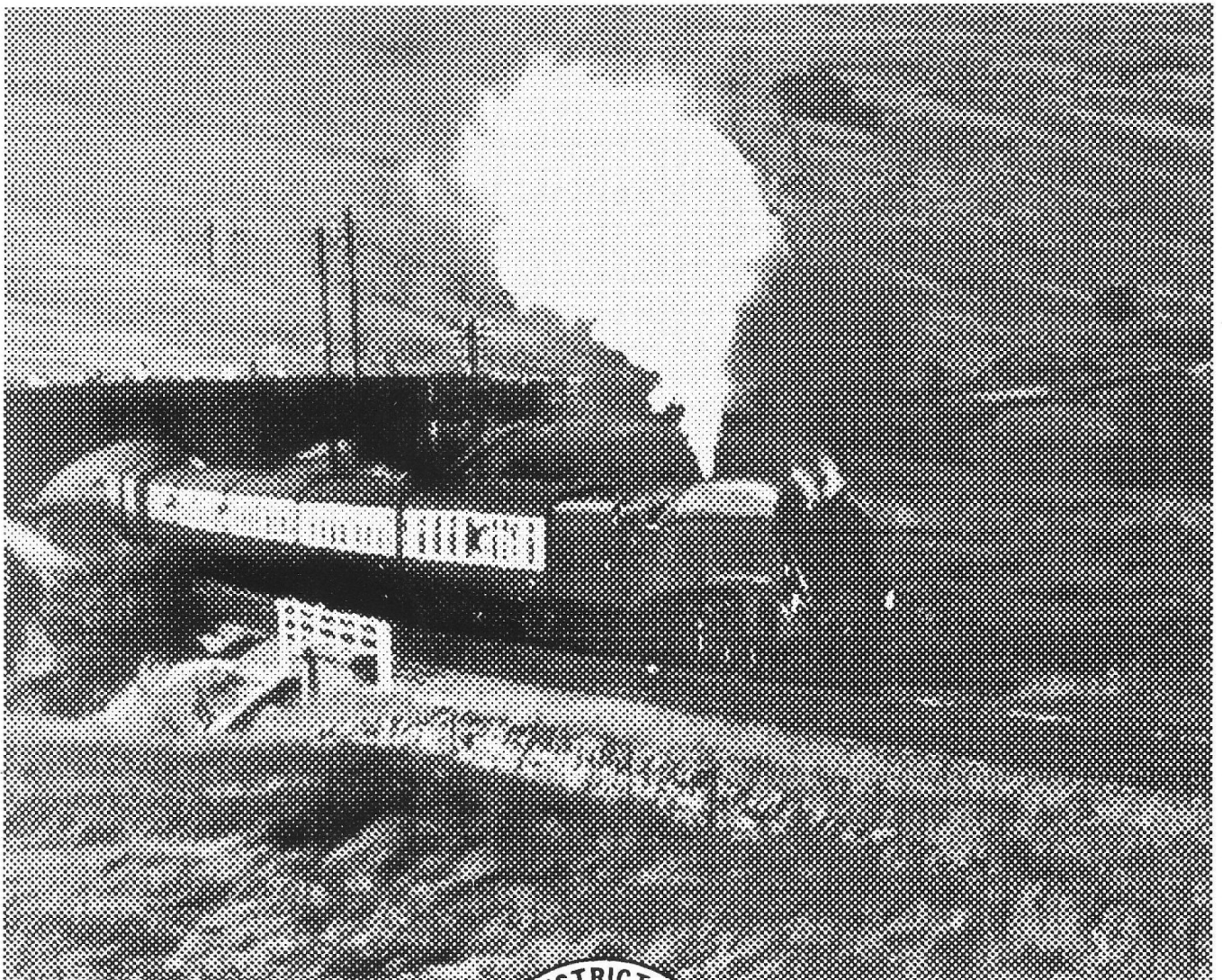


THE MARLOW DONKEY



Edition

77

June 1996



Contents

The Jubilee Line Extension

The Wisconsin Central
Story

COMMITTEE

President: Sir William McAlpine Bt
Vice-President: Bas Woodward
Chairman: Eddie Lewcock 29 Rupert Avenue, High Wycombe, Bucks. HP12 3NG
Tel: (01494) 525638
Vice-Chairman/Treasurer: Peter Robins 95 Broome Hill, Cookham, Berks. SL6 9LJ
Tel: (01628) 527870
Secretary: Roger Wallis 9 Bream Close, Marlow, Bucks SL7 2BB Tel: (01628) 485463
Publicity: Tim Speechley 11 Rydal Way, High Wycombe Bucks. HP12 4NS.
Tel: (01494) 437428
Outings Organisers: Gordon Rippington 01494 711828 and Tony Caton 01628 473723
Julian Heard 58 Chalklands, Bourne End, Bucks SL8 5TJ

CONTENTS	page
CHAIRMAN'S NOTES	3
TIMETABLE - Forthcoming Meetings & Excursions	5
SOCIETY NEWS	5
SWANAGE TRIP	6
RAILWAY ROUNDABOUT/MAILBAG	7
THE JUBILEE LINE EXTENSION	11
THE WISCONSIN CENTRAL STORY	14
BOOKSHELF	22
25 YEARS AGO	23
10 YEARS AGO	24

FRONT COVER PHOTOGRAPH: Gordon Rippington's winning shot in the colour print section of our annual photographic competition of A4 Pacific 4498 Sir Nigel Gresley approaching Ais Gill summit with a southbound run over the Settle & Carlisle in 1986.

CHAIRMAN'S NOTES

In these, my first set of notes as your chairman, I must take a look back over the years and thank our previous chairman for all the work and effort that he put into the job and also for the production of the "Marlow Donkey". It takes a lot of time and thought and patience to carry out both these jobs and Mike performed them very well indeed.

We have many helpers in our Society, a number of whom work quietly in the background. I am thinking particularly of our wives, mothers and girl friends or whoever it may be who quietly type away at articles for the magazine or Committee minutes and similar. All of us must be thankful for the help that they give, so helpers thank you all very much for your efforts.

On discussing the history of the Society with various authorities it is clear that I am the fourth Chairman in the lifetime of the Club, the first being Les Spicer, who held the post for only a short time.

The first newsletter came out in April 1977, following upon the first formal meeting in February, although it was at a meeting in the January that a number of members decided to form the Society following on from W.E.A. meetings from the previous year. The last time that I was a Chairman of a Railway Society was before the M.&D.R.S. was founded, as Chairman of the Bristol Railway Circle before leaving Keynsham in 1968!

Taking on a chairmanship is a time for reflection on the passing scene. I started life close to the GER section of the LNER and knew all about the stygian gloom of Liverpool Street in those days, but the fascination with steam started then. In many ways pre-war it was a well run line. The turn around of suburban trains (Commuter to the uninitiated) was almost as fast as with m.u. stock, whilst the thunder of expresses going out to East Anglia behind Clauds, 1500's and the new Sandringham, created indelible memories.

A move to the Southern was a bit of a come down with the Southern Multiple units working efficiently except in thick fog which in those days was just that! Again, efficiency was obvious even on heavily occupied lines. I remember one summer Saturday morning looking out of the window and seeing five trains on the two down lines near Raynes Park and all moving.

Trips to Manchester from London involved Compounds and Jubilees and I little thought then that my overalls would become greasy working on the former in the famous Derby works, where, as a pupil one quickly learnt about the other side of railway life!

Our railways have changed dramatically since those days and one can only muse at "might have beens", for instance if the NER had dominated the LNER rather than the GNR designs would we have had electric trains on the East Coast Main Line before the war?

Some changes are obvious, such as the speed of modern long distance trains, both HST and Electric Powered. However the "Cult of Complexity" which exists now in so many areas has resulted unfortunately in some drastic delays in service entry; for instance the new "safety case" procedures of the Health & Safety Executive and Railtrack have prevented over £455 millions worth of brand new rolling stock from turning a wheel in revenue service, some of the equipment being idle for a year, including almost a complete fleet of locomotives.

Compare this lamentable performance with the introduction of the LNER "Silver Jubilee" train; following trials with the "Flying Scotsman" in November 1934 and more importantly "Papyrus" in March 1935. A completely new design of locomotive and luxury coaches were built and entered into service in September 1935. Now that is the way to run a railway!

We are currently witnessing a melting pot scene on our railways, with the creation of so many companies. Confidence cannot be generated and we can only wait to see what transpires in a few years time, for the scene seems well set for inter-company wrangling. It can be likened to

“blind men running a three-legged race”.

The steam scene looks a little more hopeful than last year particularly if the summer turns out cooler and moister than last. Some salutary lessons have been learnt; particularly about the flooding of the market with expensive specials which loaded badly when they did run. However it is interesting to see the continuing widespread interest in the fascination of dirty smelly old steam power!

To think that steam locomotives are now being built again in Britain and Switzerland whilst building is finishing in Asia. We tend to become blasé about the preservation of old locomotives but it has to be remembered that a lot of people have put a great deal of dedication, time and effort into re-creating old tyme railway scenes; whilst the recreation of locomotives like the “Duke of Gloucester” with its complex Caprotti Valve Gear are great feats of engineering within the resources available.

Railways in all their forms, provide a many faceted source of interest to a large number of people. The hobby provides a quality therapy to enthusiasts and can be an escape from an increasingly pressurised world where the push button reigns supreme. In the worlds of reservation and modelling scenes the detailed study of railway history is quite remarkable and long may it remain as an antidote to some of the less pleasant characteristics of modern life.

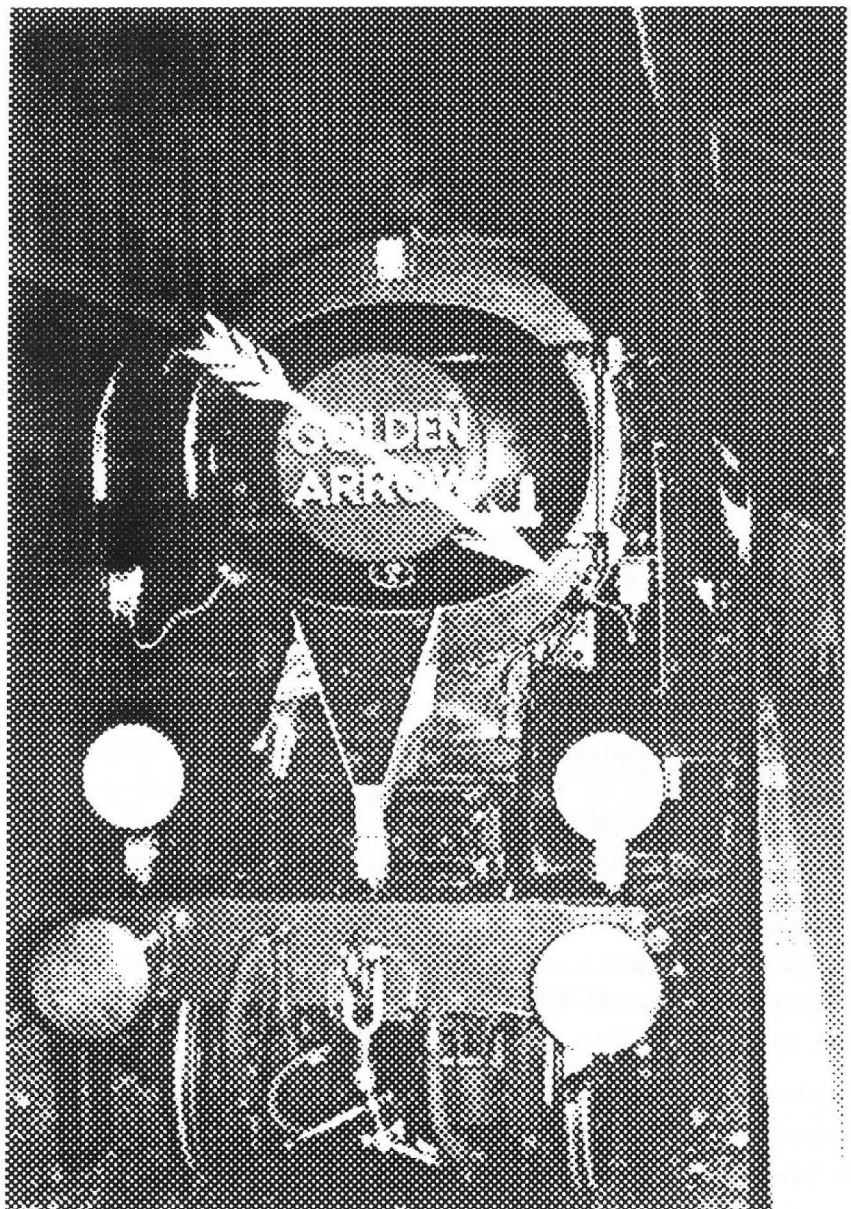
Our Society provides a meeting ground of like minds who have rightly succumbed to the fascination of rail transport.

The committee does its best to select a good range of interesting speakers and welcomes any helpful suggestions from our members; one such has caused us to set up a future talk by a botanist from Kew Gardens, the talk however will not be about plants!

So may our Society prosper, we have a good venue, and get good speakers. I would ask members to try and introduce new members if possible, more bottoms on seats are always welcome. In the meantime we are thinking about the 20th year of our existence and suitable celebrations to mark this event. Ideas are already circulating but more are always welcome to your committee.

A shot from my own archives Clan Line at Banbury on a Shakespeare Express in September 1986. The cost for my wife and myself was £24 each for full Pullman service!

John Tuck



TIMETABLE

FORTHCOMING MEETINGS

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

Thursday 20th June **RAILWAYS IN THE CHILTERNES** Roger Bowen

Roger's part time occupation as a railway lecturer is well known, tonight he takes a look at local railway history over the past few decades.

Thursday 18th July **RUSSIAN STEAM** Adrian Palmer

The fall of Communism and end of the Cold War has opened up the former Soviet countries to Westerners. For their part, these struggling nations are reviving their stored steam fleets to attract enthusiasts and hard currency. Adrian shows what delights are to be seen in steam's lost continent.

Thursday 15th August **STEAM UP AND BAR-B-QUE**

By kind invitation of Julian Heard we are able to hold an evening event at the Chalk Valley Railway, 58 Chalklands, Bourne End. The G Scale narrow gauge system has radio controlled live steam, Julian says we can all have a go at driving! A bar-b-que and drinks will be laid on by the Society for which a small charge will be made.

Thursday 19th Sept. **IT'S THAT MAN AGAIN!** Ron White

Yes, it's time for another trawl through the wonderful archives of Colour-Rail with narration delivered in the unique style of Ron (it's in my catalogue, price £5) White.

Thursday 17th October **CUBA** Colin Miell

Thursday 21st November **IRISH NARROW GAUGE** DavidPinniger

Thursday 19th December **CHRISTMAS SOCIAL**

1997

Thursday 16th January **PHOTOGRAPHIC COMPETITION**

Thursday 20th February **AGM**

Thursday 20th March **INDIAN RAILWAYS** Dr Brandham

THE MARLOW AND DISTRICT RAILWAY SOCIETY

VISIT to SWANAGE by coach SUNDAY the 7th JULY

Places to visit:-

The Swanage Railway

Five mile running track between Swanage & Nordon. Steam hauled probably by 'M7' 30053 or '257 Squadron' 34072 Approx. ten engines on site or in renovation.

The Town Centre
Beach and Gardens

Boat around the bay
Corfe Castle (not a G.W.R. 4-6-0)

Travel Details

Depart High Wycombe 08:00

Depart Marlow 08:30

Arrive Swanage 12:00

Depart Swanage 17:30

Arrive Marlow/H'Wycombe 21:00

Convenience break (both ways) at Rownhan Services (Southampton)

Fare :-	Swanage & Railway	Adult £13	Child £8
	Swanage Only	Adult £8	Child £6

BOOKING FORM

MDRS To Swanage Sunday 7th July 1996

NAME _____

Number of Tickets Required

Swanage & Railway No Adults

No Children

Swanage only No Adults

No Children

Pickup Point Required H'Wycombe

Marlow

Please tick

Please forward to :-

Tony Caton or Gordon Rippington

Submitted £ _____

THANK YOU

RAILWAY ROUNDABOUT

Notes and News

Steam saves the day in Bosnia

How veteran steam locomotives were re-introduced into service to maintain electricity supplies in Bosnia was referred to in the Times on 4th May.

The Tusla-Kreka mines relied on rail distribution of coal to Power Stations in Bosnia but the diesel locomotives were put out of service during the war by lack of fuel. Mr nSaracevic of the mines got 12 old steam locomotives out of store, which included eight wartime Kriegslok German build and four series 33 built in Yugoslavia between 1952-57, and approached Mike Bristow a British Overseas Development Association officer in Tusla. He got hold of items such as whitemetal, oil, gaskets etc. to the value of £12,000 which enabled the locos to be run on the coal trains essential for power station coal supplies.

In Mustafa, Saracevic's words, many nights were spent at the mines trying to create makeshift parts then - "I knew the British still had some steam trains. They are a strange breed and they like their traditions, so I call the ODA and asked if they could help to supply some spare parts!"

MAILBAG

Dear Members,

May I take the opportunity of thanking all members for their kind remarks, thanks and the plague presented to me on the occasion of my retirement from the Chair and Committee at the Annual General Meeting in February. It is good to know my efforts over the past years have been appreciated.

I now look forward to being able to sit at the back and enjoy the meetings without having to organise everything!

Yours faithfully

Mike Walker

EDITORS COMMENT

Welcome to the new look Donkey, I hope you like it. I would very much like to hear feedback from members.

Please excuse the short 'Railway Roundabout' I did not have time to pull this together, hopefully next issue I will be more organised. I also hope there will be more contributors, if it was not for the stalwarts such as Mike Walker, Eddie Lewcock and Roger Bowen (all of whom I would like to thank very much) we would have a very thin edition of the Donkey.

I look forward to receiving more articles for the next issue, please bring them to the next meeting. If you have some reminiscences of the past with a photo or two jot them down, they maybe very interesting to others. They do not need to be full length articles such as Mr Walkers, but if they are thats great. I would still like some more volunteers for typing. A big ThankYou must go to Roger Wallis's wife for doing most of the typing.

My address is: 35A Danywern Drive, Winnersh, Wokingham, Berks RG41 5NS Tel:01734-788225 or E-mail:100745.3446@compuserve.com

Quiz Line

by Keith Brown

Up to London for a visit

The arrival platforms at Paddington were well filled with trains conveying parties to London for a days outing. Each train is numbered from 1 to 6. From the clues given below can you name the locomotives number of each train and state which party were conveyed by each train and its originating station?

1. The foriegn students from Shrewsbury arrived aboard a train indicated by an even number in the diagram.
2. Castle class loco 4082 had drawn int Paddington with train number 5; the name of this trains originating station does not begin with 'B'
3. The train that conveyed the American tourists is platformed between the one that originated at Oxford and the one hauled by Kinley Hall 4936.
4. County of Berks 1002 brought in a train which is numbered three lower than the one that conveyed the school party.
5. Train number 3 had originated at Weymouth.
6. The footbal supporters were hauled by the powerful King 6000, but they did not board thier train in Birmingham.
7. Members of the gardening club had travelled in train number 2.
8. The Saint 2920 had struggled up from Plymouth after making a very early start that morning.

This grid is printed to assist you in solving the clues.

	1002	2920	4082	4936	6000	6861	American Tourists	British Legion	Football Supporters	Foreign Students	Gardening Club	School Party	Birmingham	Bristol	Oxford	Plymouth	Shrewsbury	Weymouth	
Train 1																			
Train 2																			
Train 3																			
Train 4																			
Train 5																			
Train 6																			
Birmingham																			
Bristol																			
Oxford																			
Plymouth																			
Shrewsbury																			
Weymouth																			
American Tourists																			
British Legion																			
Football Supporters																			
Foreign Students																			
Gardening Club																			
School Party																			



Quiz Line

ANSWERS HERE

1

2

3

LOCOMOTIVE

PARTY

FROM

4

5

6

LOCOMOTIVE

PARTY

FROM



Members of the MDRS waiting to catch their first tram in Sheffield.

A full report will appear in the next issue.

WHAT'S THE DIFFERENCE?

Keith Brown

Railway timetables have always fascinated me and on paging through the last Bradshaw prior to the creation of the 'big four' on 1st January 1923 prompted me to extract the following.

Train Frequency	July 1922	March 1996
<u>To Marlow</u>		
Monday to Friday	17*	25
Saturdays	18	19
Sundays	18	11
<u>Bourne End to Maidenhead</u>		
Monday to Friday	17	23
Saturdays	17	19
Sundays	12	11
<u>Maidenhead to Paddington</u>		
Monday to Friday	28	74
Saturdays	29	61
Sundays	17	39
<u>To Henley-on-Thames</u>		
Monday to Friday	35*	24
Saturdays	36	19
Sundays	14	12‡
<u>Bourne End to High Wycombe</u>		
Monday to Friday	14*	0
Saturdays	15	0
Sundays	8	0

* one extra train on a Wednesday (early closing day)

‡ services commenced on Sunday 31st March 1996.

The present day service on the Marlow branch is an improvement on 1922 but the reverse has happened on the Henley branch by a larger degree.

Journey times have naturally improved over the years but by less than ten minutes as shown in the samples of the fastest trains in the table below.

	July 1922	March 1996
Maidenhead to Paddington	0823 in 33 mins	0900 in 26mins
Marlow to Paddington	0758 in 58mins	0715 in 51mins
Henley to Paddington	0850 in 53mins	0733 in 50mins
Paddington to Marlow	1855† in 58mins	1738 in 50mins
Paddington to Henley	0735 in 57mins	1753 in 50mins
	1715 in 57mins	

† The 1855 from Paddington was an Oxford train which slipped a coach for High Wycombe at Maidenhead. High Wycombe arrival was at 20.00 hrs or as Bradshaws 8.00AFT (afternoon).

THE JUBILEE LINE EXTENSION

E. W. Lewcock

The Project

The Jubilee Line extension is due for completion in March 1998 and the opportunity was taken by the writer to join a group of Engineers on a visit to the Project Headquarters at Canary Wharf, then later to visit North Greenwich station, the largest under construction on the whole extension.

From a junction near Green Park, the line will proceed via Westminster, Waterloo, London Bridge to Canary Wharf, North Greenwich and Stratford. There are a total of eleven stations of which nine will have connections to other lines. The total length of the line is 16Km; the estimated cost is in the region of £2 billion.

Each station is designed by a different architect and some exotic results occur; watch out for both Bermondsey and Stratford, whilst North Greenwich will cap them all for size; its "box" being 402 metres long by 32 wide and 20 high. Provision is being made for reversal of trains here and also for a future junction for a line to the Royal Docks.

The line has been split into a series of construction contracts for the tunnels and stations, some contractors having more than one contract to handle.

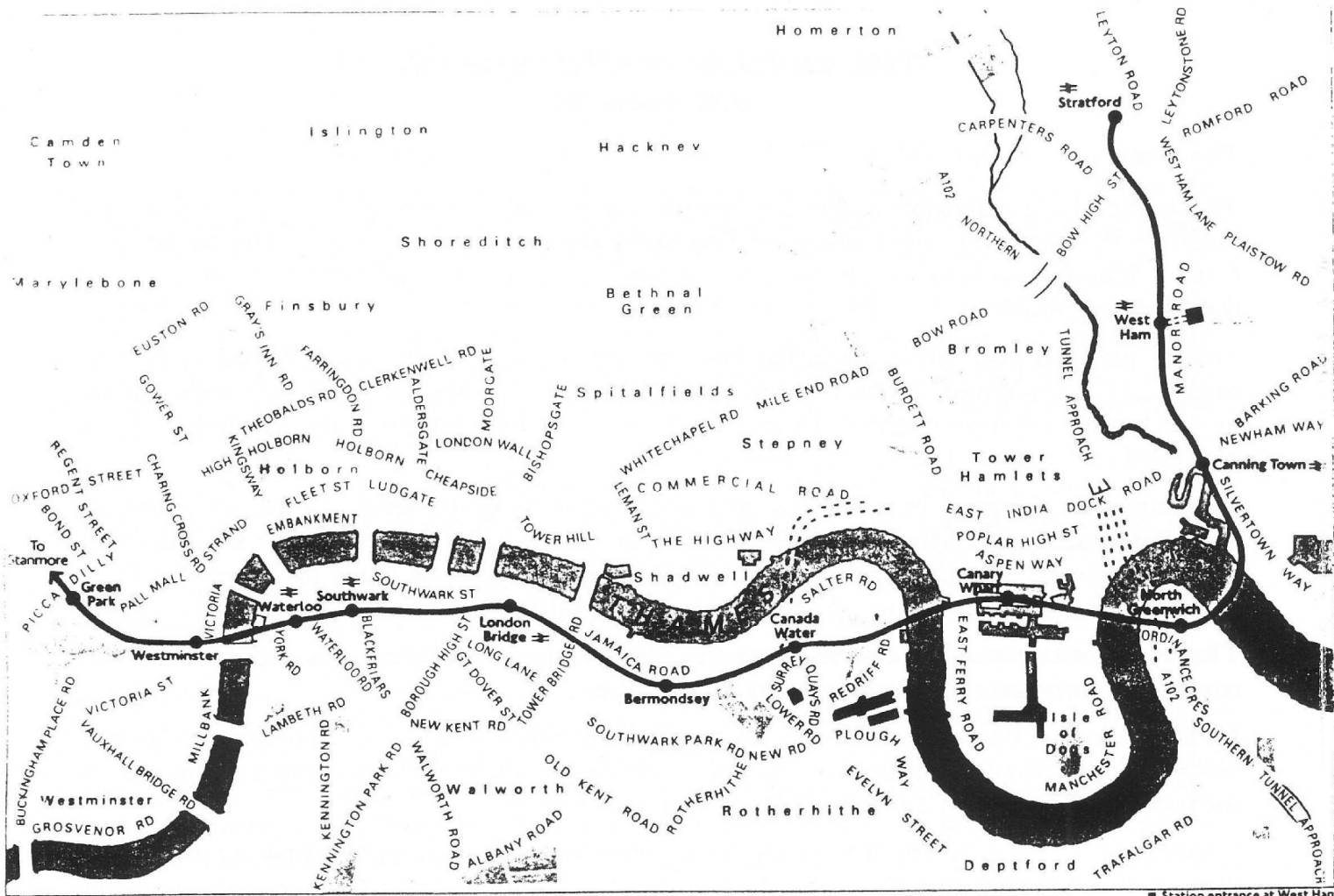
All the trains will be driven automatically and be controlled by a highly sophisticated "moving block" computerised signalling system. A visibly new feature to the travelling public will be the provision of platform doors on the new extension only.

Tunnelling Two different tunnelling techniques were necessary; the first for tunnelling through London clay at each end of the line using non-pressurised machines and the second for Woolwich and Reading beds and Thanet Sands which required a Kawasaki designed as a Pressurised T.B.M. requiring the operators to exit through depression chambers to prevent the "bends". 12.4Km of the extension will be in tunnel.

A most important factor involved in the tunnelling was the widespread use of Compensating grouting to prevent disturbance to the many buildings in Central London, under which the new line passes. At Waterloo for instance eight injection shafts of 4.5 metres diameter and upwards were filled with a large number of sleeve ports for the insertion of 70mm grout pipes leading radially from the shafts for distance up to 65 metres. The grouting fluids vary in composition but one type includes water, sodium silicate and an ester hardening agent. Very accurate measurements of building movement are made; after all we don't want Big Ben to become a second leaning Tower of Pisa!

Different techniques for creating the stations are used depending on the circumstances. Cut and Cover as used on the original Metropolitan Line but on a much bigger scale is used at Canary Wharf, Canada Wharf and North Greenwich, whilst London Bridge and Waterloo use an underground mined technique using a designated N.A.T.M. - New Austrian Tunnelling Method - system similar to that at Heathrow and using Austrian consultants. Work has temporarily stopped when the Heathrow Tunnel collapsed and much time was spent reviewing techniques and preparing documents. The construction delay lasted from October 1994 to January 1995 and the financial set-back to the J.L.E. runs into millions of pounds. The technique involves spraying cement on to reinforcing wires mounted at the surface of mined clay, instead of relying only on the use of precast concrete or iron segments. It should be added that the system has been modified following the Heathrow collapse and its use reduces the mining time scale from months to weeks.

At stations like Canada Water and North Greenwich, use of the cut and cover technique is combined with the T.B.M. units.



North Greenwich

A chance was afforded to view the huge open North Greenwich box construction being built by the consortium of Sir Robert Mc Alpine, Wayss & Freyld and Bachy.

It will be a spectacular station with passengers passing along a concourse suspended from the ceiling and above the trains. Twenty one pairs of raking columns support the ceiling either side of the concourse and not only will the four platforms enable trains to be reverse there but the design includes arrangements for a spur for a future line to the Royal Docks.

The whole box literally floats on the Woolwich beds/Reading and Thanet Sands and tunnel excavation is carried out by Kawasaki Tunnel Boring Machines operating with an air lock to counter up to 3 bar pressures in the sands. Clay in the sands caused a slowing down of cutting rate by clogging the excavation chambers but a foam was eventually used to overcome this problem.

Some of the tunnel boring has been fast, for instance a 1.1Km bore to Canning Town took 18 weeks for the eastbound tunnel with a peak boring rate of 240 metres per week. Eleven T.B.M.'s from five different manufacturers were used. Three machines were non-pressurised whilst the rest were of the pressurised design. North Greenwich site is of course ideally suited to serve the millennium site in the year 2000 so a name change seems possible there.

Westminster

The Westminster station involving connections with the District lines and passing under Big Ben is a combined open cut and mined station involving the lowering of the District lines by 300mm (near 12") in the station area. Fifty piles, already installed, will support the District lines, the subsurface levels of the new station and the new block of offices to be built over them. The whole Westminster project is a remarkable one and designed by G. Maunsell & Partners.

The Tunnels

The bore diameter of the tunnels is 4.4 metres to allow a walkway along one side of the track. The segmented tunnel linings are made mainly from reinforced concrete of three different types, a pattern fitted with gaskets being employed where the tunnels pass through Thanet Sands and Woolwich & Reading beds. Two patterns utilising wedge blocks are employed through the London Clay Areas. However at station and break out points in the tunnels a high grade Cast Iron (SGI) is used.

Naturally besides the running tunnels, there are numerous ventilation passenger access, emergency exit tunnels etc. that also employ the segmental linings of different diameters.

Platform Edge Doors

These will be fitted on the extension Station platforms only, the official reasons given for their fitment being to keep wind problems down, prevention of litter blowing around and improving air flow including platform ventilation on hot days.

The explanation given to our party for fitting only the stations on the extension is that there are too many curves on the existing platforms.

Platform doors are already in service in Singapore, Moscow and France but members of the party pointed out that problems exist in the first two areas. Bearing in mind the precision with which the trains must be stopped automatically, one is left wondering if the service frequency will be improved or otherwise, but there seems little merit in fitting half the line! We must wait and see what happens.

The Trains

A new fleet of trains is being constructed by GEC Alsthom - Metro Cammell Ltd. for use with the moving block computer controlled signalling system. The trains will run automatically and will in general, be similar in appearance to other recent trains on the Underground. Displays in the coaches will show the next station and enable information on delays etc. to be passed on to the passengers.

In general like other underground systems it is difficult for the public to get any idea of the size of this project and the care that has been necessary to keep interference to normal travel and life to a minimum.

For instance, little has been seen of the enormous amount of spoil excavated, most of which has been quietly barged away down the Thames. Checks on the ground subsidence have been made with meticulous accuracy, the Heathrow collapse being a vivid reminder of how early things may go wrong. Settlement limits between 1-5mm have been adhered to throughout Central London.

When opened hopefully in 1988, it will be a line worth visiting, if only to see some of the exotic architecture that is being created and check out on the working of the automated system.

THE WISCONSIN CENTRAL STORY

Mike Walker

The purchase of Loadhaul, Mainline, Rail express systems and Transrail by US freight haulier Wisconsin Central raises the question "who is Wisconsin Central?" For unlike Norfolk Southern, Santa Fe, Southern Pacific or Union Pacific it has not, until now, enjoyed a high profile on this side of the Atlantic. So, what is it and why is it a beacon in the industry?

Wisconsin Central is a relative newcomer to the US railroad scene as the company was only formed in 1987 to purchase approximately 2000 miles of line in Wisconsin, upper Michigan and south to Forest Park in the north west suburbs of Chicago from the Soo Line. During its short life it has made a major impact on the US railroad industry and gained a reputation for dynamic and innovative management.

However, to understand today's Wisconsin Central it is first necessary to consider the geography and rail history of the region. Wisconsin and upper Michigan are two of the less populated and industrial states of the USA. Bounded by the Mississippi River to the west, Lake Superior to the north, Lake Michigan to the east and the sprawl of Chicago, America's rail capital, to south, it is a land of low rolling hills. Whilst southern Wisconsin is mostly agricultural, in particular dairy farming, the northern part is forested and supports lumber and paper making as the two major industries centred around Wisconsin Rapids and the Fox River valley from Neenah north to Green Bay. There is also a limited amount of iron ore mining along the south shore of Lake Superior but not on the scale of the Missabe Range of northern Minnesota. The only major cities in the region are Milwaukee and Green Bay. Apart from the Chicago - Minneapolis St Paul (the "Twin Cities") corridor, few of the region's rail lines have ever qualified as trunk main lines.

Railroad Heritage

For years the region was dominated by three major companies supported by a number of smaller "shortlines". The Chicago & North Western had a strong presence throughout Wisconsin with a network of main lines and feeder branches including lines to the mining area around Marquette, Michigan. It had a direct Chicago - Twin Cities main line which competed with the Chicago Milwaukee & St Paul another of the big three which was particularly strong in southern Wisconsin but also had a line all the way to the waters of Lake Superior. The Milwaukee had traditionally been a "Granger Road" earning its living on the plains of the American heartland but in the early part of this century it expanded to become a transcontinental, building a line all the way to the Pacific Ocean and changing its name to the Chicago Milwaukee St Paul & Pacific. Whilst not in the area of this article this expansion does have a direct bearing on the story, for, like our own Great Central, the Milwaukee's Pacific extension came too late. Existing railroads had the north west well served and the line was a continual drain on its owner's finances, ultimately leading to its demise.

Third of the big carriers was the Minneapolis St Paul & Sault Ste Marie, known to all as the "Soo" (which is how you pronounce Sault). This was backed by the Canadian Pacific and was primarily an west - east carrier linking the Twin Cities with Sault Ste Marie, two places of the same name on each side the international border at the extreme eastern tip of Michigan's upper peninsula. It expanded in 1909 by leasing the Wisconsin Central! This, the first company to use the title, was built in the 1870's and ran north - south through Wisconsin from Superior and Ashland to Forest Park near Chicago, however it by-passed Milwaukee. The WC remained as a paper subsidiary of the Soo until 1961 when it was finally merged into its parent along with the Duluth South Shore & Atlantic, another east - west carrier along the entire south shore of Lake Superior. At this time the company cast off its cumbersome old title and became the Soo Line.

Retrenchment

Through the sixties and seventies the status quo continued, a few branches were pruned by all three but the rail map of the region stayed largely unchanged. In 1977 the Milwaukee entered bankruptcy once again and this time was forced to face reality. To survive it abandoned all its lines west of the Dakotas, some 3000 miles, in 1982 returning to its original territory and, following the Soo's lead, adopted a shorter title - The Milwaukee Road. This was not a cure however, the company was still weak and suffering from neglect and deferred maintenance. The receivers put it up for sale.

Although the C&NW and Canadian National owned Grand Trunk Western showed interest, the final purchaser for the Milwaukee was the Soo who took charge in 1985, overnight nearly doubling its size. Not all Milwaukee lines in the region passed to the Soo however, many of the branch lines in southern Wisconsin went to shortlines with varying degrees of success and are today operated by mini-regional Wisconsin & Southern and its subsidiary Wisconsin & Calumet, whilst the line north of Green Bay to the lake was acquired by the Escanaba & Lake Superior, an old established upper Michigan shortline.

Meanwhile, the C&NW embarked on a ruthless purge of its Wisconsin branches and even main lines, reducing its mileage in the state by more than two thirds. Most were abandoned but its lines between Milwaukee and Green Bay were sold to a new regional carrier, the Fox River Valley in 1988 leaving the Green Bay to Marquette line as an isolated operation following a failed attempt at a further spin off.

Even with the backing of its parent, Canadian Pacific - Canada's largest and wealthiest corporation - the Soo found the task of bringing the old Milwaukee back to its former glory a formidable challenge. The Soo had a reputation for running "a tight ship" and making a good living out of the marginal traffic the region had to offer. It still ran in the traditional manner with FIVE man crews on its freight trains and all the traditional feather bedding and arcane work practices the US unions insisted on protecting. But times were changing in the northland, new highways had opened up and traditional traffic bases were being lost to trucks. Passenger services had been vanishing since the fifties and ceased entirely north of Milwaukee with arrival of Amtrak in 1971. If the Soo was to survive it had to change.

A feature of the American railroad industry in the eighties was the creation of new regional railroads which purchased marginally profitable sections of the super railroads. With reduced overheads, revised working practices and local marketing they were able to earn a profit and feed the former owners who were free to concentrate on the trunk hauls. Whilst these regionals were largely new, independent operators, the Soo sought to set up a regional as a wholly owned subsidiary. Thus was born Lake States Transportation in early 1986. The idea was that LST would assume responsibility for some 2300 miles of former Soo Line and Milwaukee Road trackage in Wisconsin and upper Michigan and operate them with the kind of revised work rules, reduced crews etc, the regionals were introducing. It was hoped this would restore these lines to profitability. Unfortunately, the unions did not co-operate. To them, LST was simply a part of the Soo so they fiercely defended their traditional practices. Within months it became clear to Soo management that their scheme had derailed and LST was put up for sale.

Rebirth - eventually

The "for sale" sign attracted the attention of a group of mid-western railroad managers who had been planning to start a regional. They were headed by Edward Burkhardt who had spent twenty of a 29 year railroad career with the C&NW, latterly as Vice-President Transportation, and Tom Power who had been on the railroads for 24 years and was the Milwaukee's Vice-President in charge of its reorganisation. These two gentlemen became the President and Vice-President respectively of newly formed Wisconsin Central Limited which with the backing of

several large banks and Richard Ogilvie, a former Governor of Illinois, put a bid of \$81.3 million to Soo Line for 2063 miles of the LST system including track and buildings, etc., but not the locomotives or stock. It would make WC the largest of the new regionals.

The bid was accepted and detailed planning commenced with a view to WC starting operations on 11 September 1987. Arrangements were made to buy or lease motive power and rolling stock, install new computer systems and recruit staff. From the outset WC wanted to be a non-union operation employing the kind of modern flexible working practices the Soo had wanted. Whilst a few Soo and LST employees joined WC the majority elected to stay with Soo, who, under union agreements, had to find them jobs or pay them to remain idle! WC therefore had to recruit staff from across the country.

Just as all was set for a seamless transition on 11 September, the Interstate Commerce Commission (a Government regulatory body) stepped in at the behest of the unions and ordered a 45 day hold in the proceedings so it could re-examine the implications of the sale. This was a major blow to WC's management as everything was put on hold. New staff converging on Wisconsin from 42 states had to be turned back, Soo had to reinstate staff who had resigned and WC had to find short term leases for its motive power to bring in cash. Days and nights of frantic negotiations followed and eventually the ICC gave in as suddenly as it had intervened. WC had a "high green" and started operations at 00.01 on Sunday 11 October 1987. The revolution was on the road.

Initially though, things were a little chaotic. The sudden go-ahead caught WC off guard. Staff had to be hurriedly recalled and locomotives borrowed to cover for WC's own which would not become available for a few weeks. There was also a matter of 2700 freight cars around the system which could not be quickly identified due to computer problems. Nothing was proved, but it is believed this was the result of a parting shot from a disgruntled Soo employee.

Restructuring and Manpower

Soon things settled down and by the close of 1987, WC was operating its 2063 mile system with 98 locomotives and around 700 employees. Despite years of loss making operations by Soo and LST, the new operator was able to turn its first operating profit in March 1988 and has remained consistently, and increasingly, profitable since. It even managed to start repaying the capital of its huge start-up debt within 12 months.

What is the secret of its success? Simply the way Wisconsin Central does business. For a start it completely revised working practices. Traditionally trains had 5 man crews of which only two actually did any work, they were limited by union agreements to working only about 108 miles a day before bonus payments were triggered. Crews had set jobs which were jealously protected, yard crews stayed in a yard, road crews only handled main line runs. Among track and workshop maintenance staff there were a multiplicity of crafts, restrictive practices and unions.

WC swept all this away. Unions were not recognised, although all employees have the right to belong to a union if they desire - most don't. Crews now do a full days work and train crews consist of two men, Engineer (Driver) and Conductor. Where a lot of switching is to be performed en route a third man may be sent along where an extra pair of hands can speed up operations. Many Engineers and Conductors have been encouraged to qualify in each other's jobs to maximise flexibility. Road crews now routinely form up their own train in the yard before departure whilst yard crews will travel several miles over a main line to reach a customer to deliver or collect cars promptly. In other trades, track crews have been trained to operate locomotives at work sites, to avoid having a largely idle train crew present, and in the harsh winter months move into the workshops to assist in the overhaul of their equipment, locomotives or rolling stock, after suitable training of course.

Although pay scales on WC are some 15% below the average union rates on the big railroads, the new practices and flexibility does ensure more stable employment prospects and all staff enjoy good fringe benefits, health and dental care, insurance and retirement programmes along with a generous profit sharing scheme. WC employees earn around 40% more than the average manual wage in the region. The company has an open door policy, all staff are kept informed of what is going on and consulted. Four times a year the senior management tries to meet all staff and discuss all matters of mutual interest, and at any time any employee can contact any manager from Ed Burkhardt down if he has a problem or suggestion. The company tries to function as a family not an “us and them” situation of managers and workforce. Generally it works and staff moral, and a feeling of involvement within WC is the highest in the US industry.

The Customer Comes First

But employees are only a part, albeit important, of the picture. WC’s philosophy is that running a railway is no different from selling soap powder. You are selling a service which the customer expects to be cost effective and 100% reliable. A railway is like a tree, to have a healthy trunk it needs strong roots and viable branches. Too often in the US (and UK) the railroads have abandoned marginally profitable branches and services to concentrate on the trunk lines which, without their feeders, in turn weaken - this was the largest mistake of the Beeching era. Throughout WC’s area, Soo had been abandoning branches and industry sidings for years, giving up traffic without a fight to the trucks. Customers who remained for the railway found that arrivals and pick ups could not be relied upon.

On WC, if a customer says “jump” the company pole vaults. The customer is king, he pays the WC’s bills and wages allowing it to survive. As a shipper, if you ring WC you will usually speak to the same person who is able to arrange delivery or collection of loaded or empty cars at an agreed time and set a rate for the job in a matter of hours at the most, with most big roads it takes days at least. WC recognises its customers need to rely on its service so it runs its main trains to a timetable, not to passenger standards of accuracy, but to a defined pattern. A train will run if it has 1 or 100 cars so customer targets can be met, not wait for enough cars to become available to run a monster train.

Expanding the Business

It is not just existing customers WC looks after. It is continually on the search for new traffic and customers. It has won back many former rail users who had long since turned to road transport and many rusted sidings and spurs have been reactivated. Train crews are the company’s salesmen and scouts. They are the front line employees who come face to face with the customer. They know their jobs depend on customers and are encouraged to do all they can to increase business. They carry prepaid, addressed cards so they can alert the marketing boys at the Rosemont, Chicago, headquarters to possible new business opportunities. Pride in the job and company is such that everyone joins in and helps in the search. This policy has been immensely successful and has allowed the company to win back many long lost shippers, most significantly, many for short hauls of only a hundred or so miles (in one case just TEN miles) which it can operate profitably thanks to its flexibility.

Perhaps its most spectacular coup to date has been the Geneva Ore Train. For more than ten years Geneva Steel at Provo, Utah, has been receiving deliveries of taconite pellets (refined iron ore) from Minnesota’s Missabe range using the C&NW and Union Pacific via Superior, the Twin Cities, Omaha, Cheyenne and Salt Lake City, a distance of some 1650 miles. Originally these trains carried coal from mines along the UP main line in Wyoming but when these closed UP was forced to return the trains empty to Minnesota each time. WC, watching the entire nation as well as its own backyard for new opportunities soon spotted an opening. In conjunction with the Southern Pacific they put in a counter offer to Geneva Steel when the

contract came up for renewal. WC and SP proposed routing the trains via Superior, Chicago, St Louis, Kansas City and Pueblo, a 600 mile longer journey. Despite this WC and SP could compete on price because the WC realised that SP could use the trains to haul super low sulphur coal from the Colorado and Utah fields back to the mid-west generating stations. This five year contract was awarded to WC and SP in February 1994 and provides for the transport of 2.6 million tons of pellets and is worth ú34 million annually. A classic example of a company doing its homework, identifying an opening in the market and seizing it.

Although ore now makes up a large part of WC's revenue - it also hauls ore bound from Minnesota to Indiana and Pennsylvania when the Great Lakes freeze up in winter - the paper industry still accounts for more than half the car loadings. This includes raw materials such as pulp wood, waste paper, clay and chemicals through to finished products. Other traffic includes coal for the power generators, foodstuffs and general merchandise. The traditional mixed freight, long gone from the UK, is still the profitable backbone of WC's operations and of course figure prominently in WC's plans for the UK.

Creating The Right Image

The company also recognises that image is important to success, unlike some other railroads, large and small, who conduct business with fleets of dirty, rusting and ill-maintained locomotives (Often including one or two extra to cover for the regular failures!), WC keeps its fleet immaculate in appearance and repair. Although all the fleet, which now numbers 245, have all been acquired second hand they are nearly all in the company's classic and dignified livery of maroon with a cream band along the side and a nose high-visibility device which resembles an up-turned pine tree in cream. The company logo, a traditional American shield bearing it's title is a throw-back to the old WC and is prominently displayed. In fact WC's livery is closely based on the pre-1961 Soo scheme. Despite its pioneering practices, tradition means a lot to WC. Locomotives and rolling stock - which is also progressively being painted in the new image - are maintained in the former WC, later Soo, shops at North Fond du Lac, Wisconsin, at the south end of Lake Winnebago. Although all motive power dates from the sixties and seventies it is being kept up to date and several of the hundred strong fleet of EMD SD45 3600hp Co-Co's are now being fitted with "Q-tron" control, a micro-processor based wheelslip control system and four have received EMD's full EM-2000 micro-processor package the equal of that being fitted to new locomotives. This allows WC to employ the latest technology at a fraction of the cost of buying new. In the UK new power will be acquired as the present fleet is unsuited to such heavy rebuilding.

Expansion at Home and Abroad

Once established and successful, it was decided to expand the business by buying into other railroads both in the US and abroad, the latter being a revolutionary idea for an American railroad. First, in 1991 it purchased one of the few parts of the LST retained by Soo, the Ladysmith to Superior line. In truth WC had had trackage rights on this line from the start and hardly any Soo traffic used it, but, WC were not allowed to solicit traffic connecting at Superior for onward connection beyond the WC ("bridge" or "overhead" traffic) only traffic originating or terminating on WC. With the line sale this restriction was removed and now only applies to overhead traffic passing through the Twin Cities. Further changes came when C&NW abandoned most of its line from Eau Claire into Superior in 1992. WC bought the northern section as a better alternative to the old Soo route.

1993 was a year of major expansion. In August it finally completed the purchase of the 214 mile Fox River Valley (which was a 1988 C&NW spin off) and the Green Bay & Western from the ITEL Corporation for ú4.5 million. The GB&W was a 254 mile line connecting Green Bay with the Mississippi at Winona and had nearly a century of service behind it. Both companies were unionised and so WC set up a subsidiary, the Fox Valley & Western, to operate the

properties - although outwardly they are no different from the main system. The unions, now facing reality themselves, have agreed to the adoption of most of WC flexible practices on the FV&W although last ditch legal actions by the unions had delayed the sale by six months. Following the takeover there has been some rationalisation in terminal facilities in Green Bay and with the abandonment of two sections of the GB&W and part of the FRV where it runs parallel to the WC between Fond du Lac and Neenah, although in Oshkosh it is the former WC which is being abandoned to avoid a lengthy section of street running through the city centre but near Fond du Lac the FRV is being retained to form a section of double track.

A month later, in September 1993, WC expanded beyond the US for the first time when it became the major partner in a consortium to lease the entire 2500 mile New Zealand Railways. Although the Government still owns the system, all operations, maintenance, marketing and investment are now the responsibility of the private operator. Whilst the New Zealand operation is managed locally, WC moved several key operating and management staff down-under to instill the WC philosophy. Current indications are that they are being successful and NZR is on the up once more after a long decline. WC's partners in New Zealand, venture capitalists Berkshire Partners of Boston and Faye Richwhite of New Zealand are backing its UK expansion.

Nearer to its own backyard, WC expanded into Canada in February 1995 with the purchase for \$5.6 million of the 321 mile Algoma Central Railway which, along with CP Rail, makes an end on connection with WC across the International Bridge at Sault Ste Marie. Although the ACR title is being retained, the operation is being fully integrated with that of the new owner and ACR's locomotives are exchanging their traditional grey, yellow and maroon livery for WC's. Although unionised, WC was again able to implement its policies and immediately reduced staff from 500 to 200 whilst increasing the number of train-miles operated.

The purchase of ACR, and NZR, brought WC into scheduled passenger operation for the first time. Until then WC had only operated occasional specials, some hauled by steam. Not involved in VIA, Canada's national passenger rail system, ACR operates two passenger services. A mixed train operates over the entire line from Sault Ste Marie to Hearst, thrice weekly in winter and daily (excluding Mondays, northbound, and Tuesdays southbound) in summer. Also in the summer it runs a popular daily tourist train to the Agawa Canyon 131 miles north of Sault Ste Marie. This often forms up to 20+ cars especially in the leaf viewing autumn. During 1996 WC moved into the commuter business when its Chicago main line south of Antioch began to host a new service operated by Illinois' Metra rail commuter system.

Eight years on from its birth, WC is now a major force in the industry. It is now employing more people than its predecessors ever did, combined, with a labour force of over 2400. It is running more train-miles than ever before, and, more importantly, more ton-miles over a system which has expanded to 2850 miles. Its busiest route, between Chicago and Neenah now carries more than 30 million gross ton-miles per mile annually. Business is booming and setting records, by 1994 its annual revenue had risen to \$141 million and profits to \$25 million, nearly doubling the 1993 figures. It is respected by its customers and has won industry awards for its standards of service.

The expansion of Wisconsin Central has not finished. It openly admits to actively seeking possible new acquisitions both at home and overseas, although for understandable commercial reasons it refuses to identify likely candidates. What remains to be seen is how the WC revolution will be applied to the UK. Certainly the indications are bright, massive capital investment, the recapture of long lost business and rebirth of wagon load traffic. After nearly half a century of State control many among our railway's employees do not understand the facts of commercial life. Educating them and the nation generally will be as big a challenge as the rebuilding of the business.

One thing is clear however. There is probably nobody better qualified to succeed than the WC team. Many will have to leave the industry but for those who survive and those of us who watch, the future is secure and exciting!

County Class Search

19 of class in puzzle.

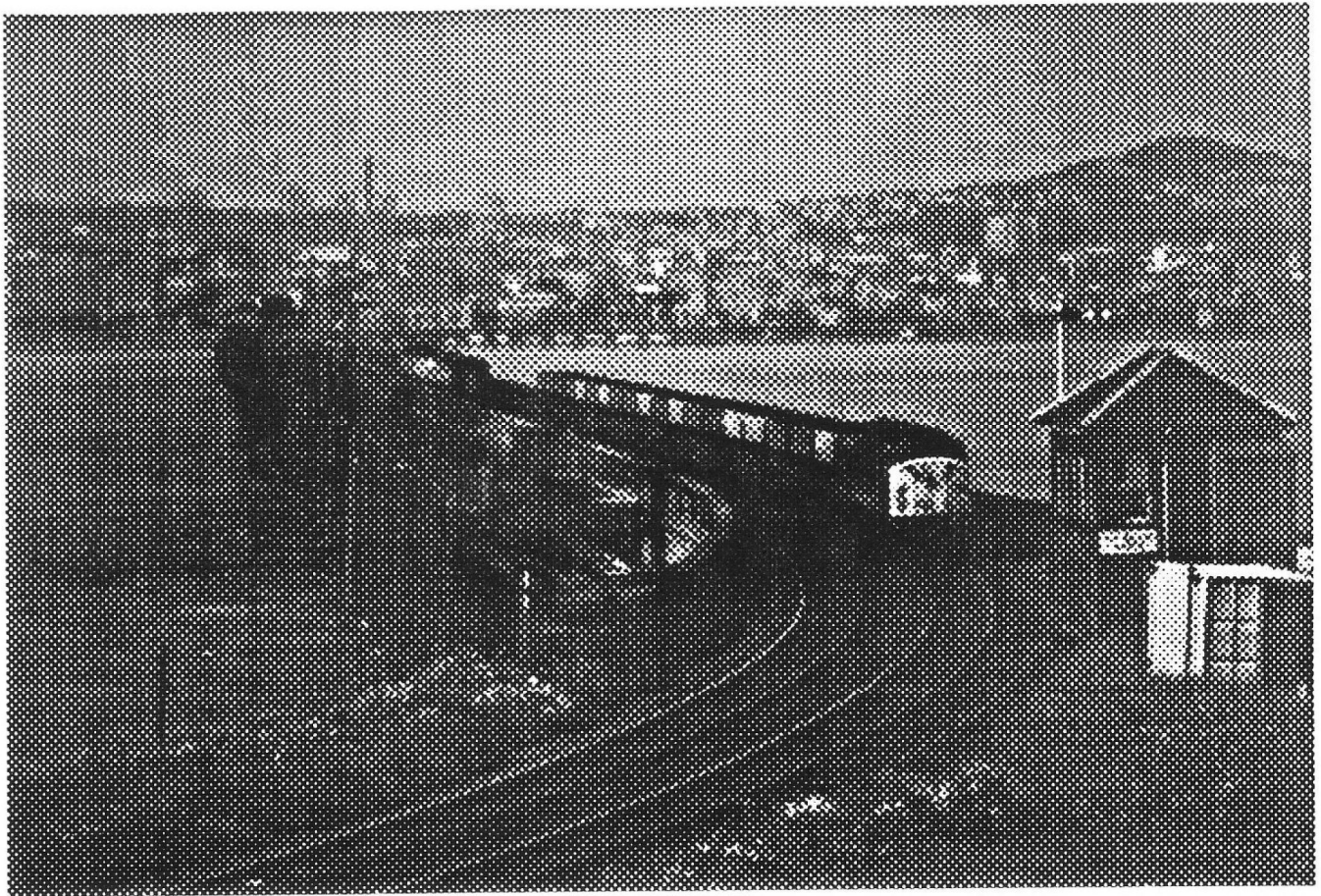
Unused letters form full name for 20th member.

by Keith Brown

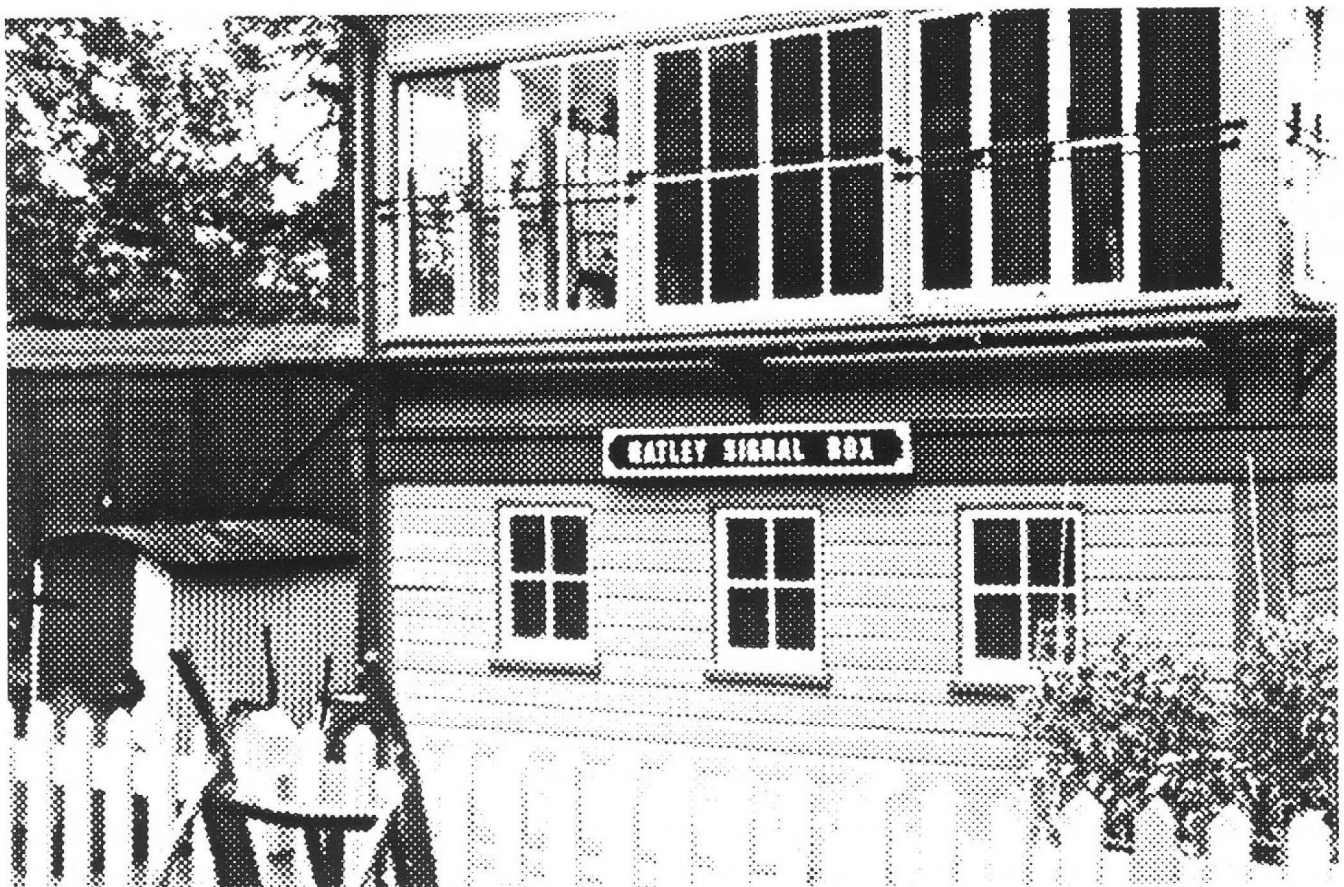
Below is Peter Robins fine shot of 0-6-0PT 9681 on a charter frieght photo special at Whitecroft in the Forest of Dean. This was class A Colour Slides UK Steam in our annual photographic competition.

L	Y	C	A	R	M	A	R	T	H	E	N
M	G	A	U	N	A	G	I	D	R	A	C
I	E	E	K	O	R	B	M	E	P	H	O
D	O	R	S	E	T	N	O	V	E	D	R
D	H	N	I	S	T	N	T	S	N	E	N
L	T	A	H	O	R	U	T	O	T	O	W
E	U	R	A	M	N	E	V	S	R	S	A
S	O	V	N	E	R	E	E	E	A	K	L
E	M	O	T	R	D	C	T	E	D	C	L
X	N	N	S	S	I	F	C	H	N	U	O
W	O	R	C	E	S	T	E	R	O	B	O
C	M	S	L	T	K	C	I	W	R	A	W





Peter Robins shot of a class 40 coming of the south end of the Tay bridge, from a colour slide which won the Class B section UK non-steam in our annual photographic competition.



Arley signal box renamed for TV filming to appear later in the year. Eddie Lewcock

BOOKSHELF

Alan Costello

The Big Four Remembered

Promotional Reprint Co

J Whitley and G Morrison

ISBN 1 85648 179 4

This is a new 'combined edition' of four books originally issued between 1979 and 1985. It is a photographic look at the four main regions over the years. As it is a reprint, the quality of the photos are not as good as the originals but they are still reasonable. As the price of the book is only £9.99, it provides very good value with a large selection of pictures.

On The Rails Around Europe

Thomas Cook

ISBN 0 906273 71 4

Anyone who wants to tour Europe by rail will find this book useful. It looks at most of the European countries (apart from former Yugoslavia). The rail network of each country is looked at in turn. Maps of the main cities are included together with suggestions of accommodation and places to visit when travelling by rail. The various rail passes are listed. A handy guide to the railways of Europe. Include this book together with the Thomas Cook rail map in your luggage and you will not need anymore guide books.

The Day Of The Holiday Express

I Allan

R Woodley

ISBN 0 7110 2394 8

A look at summer Saturdays on the Western Region around 1960 with an in depth look at the workings all over the region on 9/7/60. The Warship diesels were being introduced at that time but the majority of holiday trains were still worked by steam. Observers were placed over the region eg Snow Hill, Exeter, Bristol, Swindon and S Wales and the progress of the trains was monitored. Nearly every engine in working order appeared to be roped in, with shed foremen rostering freight locos (most freight traffic being cancelled) where necessary. An appendix lists each engine (in numerical order) together with its shed code, train working and the page reference. In all a very detailed look at the operations on a day during what was probably the last year when steam dominated the holiday traffic. A large selection of good quality pictures mainly taken on the 9th are included.

Mail by Rail

Ian Allan

P Johnson

ISBN 0 7110 2385 9

The first travelling post office (TPO) train ran in 1838 and the book covers the history of this train until 1995 when the electric TPO appeared - but is still waiting to come into service (although the book says otherwise). After listing all the trains, the book covers the rolling stock, how the mail is transferred from the train to the lineside and vice-versa, and also looks at postmarks and first day covers. Finally the operation of the London Post Office Railway is described with a map showing the line when built in 1927, and a very detailed map of the present system. Photos showing the inside and outside of the trains can be found throughout the book.

Yesterday Once More

F Rich

P E Waters & Associates

ISBN 0 948904 542

In 1911 George Washington (not the American) started work as an engine cleaner at Brighton earning the equivalent of 70p for a 11_ hour day, 7 day week. His story covers his career with LB & SC Railway until his retirement in 1960. The author was a good friend of George and the book tells his story from the long talks they had together. George was kept busy as in 1911 Brighton had an allocation of over 100 engines. Not everything was hard work - during the hour break during summer nights, the cleaners would spend the time 'skinny dipping' in the sea or in one case, the shed water tank! After a while he became an office assistant to the Superintendent and one of his duties was to search the early incoming trains for a discarded Times for his employer, who refused to buy a paper. He became a driver in 1923 and his reminiscences until he retired can be found in the book. An entertaining read if you can get hold of a copy, as I gather it is a limited edition.

25 YEARS AGO

ROGER BOWEN

In the summer of 1971 the London Underground was in the news. Firstly the first sod of the London Transport Piccadilly Line 3.5mile extension from Hounslow West to Heathrow Airport was cut near Hatton Cross on 28th April by Desmond Plummer, Leader of the Greater London Council. Secondly, to celebrate the end of steam locomotive operation on the underground, London Transport arranged a commemorative run on Sunday 6th June made by 0-6-OPT No L94 hauling a train of engineering vehicles from Moorgate and Barbican to Neasden Depot.

On BR introduction was taking place on the East Coast Main Line between London and Newcastle of the final version of the BR MkII range of passenger coaches, the MkIID. 350 of these first production, air conditioned vehicles were due for delivery up to the end of 1972. Delivery was from BR's Carriage Works at Derby.

Large scale electrification works began on the London Midland Region section of the West Coast Main Line between Weaver Junction and Gretna Junction. 159 over bridges in this section needed attention.

A working party set up at a public meeting organised by Somerset County Council published a report 'Report on the Feasibility of Re-opening the Taunton-Minehead Railway'.

An offer of £5,750 for track bed and land of the former Welsh Highland Railway was made to the Official Receiver by the Welsh Highland Railway (1964) Ltd. The Receiver recommended local authorities concerned to approve its acceptance.

Fastest steam in 1971 - steam may have gone in Britain but it still reigned elsewhere in the world. In the summer of 1971 the fastest steam schedules were a series of trains between Bomberg and Lichtenfels in Northern Bavaria where the schedules called for a 19 minute start-to-stop time for 20.4 miles, a speed of 64.4 mph. Locos were the DB class '01' Pacifics with trains of up to 10 carriages. However, May 26th saw the end of steam on the Nord Region of the SNCF when Pacific 231-K-82 hauled a commemorative special from Paris Nord to Calais Maritime.

10 YEARS AGO

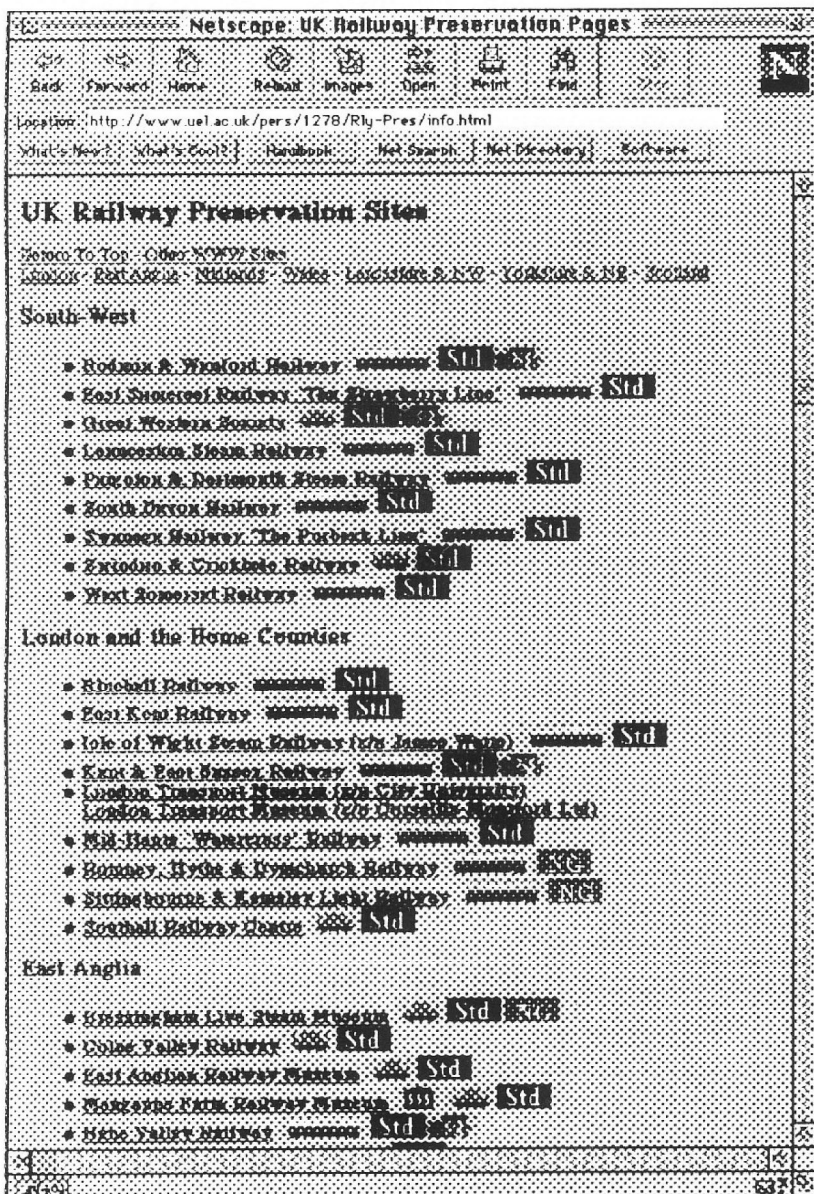
ROGER BOWEN

From the Marlow Donkey of June 1986.

Bas Woodward's introduction gave a nostalgic comment on the railways of the Isle of Wight as a taster for that year's club visit to the island. Other comment was on an excellent talk on the secrets of the Bounds Green maintenance depot and a note that the membership had reached a record 50 by April.

The main articles were an update on the position regarding work on the Fawley railway and a detailed account of the 'Andover Rail Event' by David Gardener. Finally Len Stroud completed his story of 'Donkey Days' with Part 3 - a wonderful account of years gone by on the branch.

IN THE NEXT ISSUE RAILWAY SITES ON THE INTERNET



*Please
help
me
fill
this
space
and
more*