

UNDERGROUND NEWS

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THE TIMETABLE

Friday 10 August

Talk, 'The History and Development of Acton Works', by Mr. J.G. Bruce, O.B.E. 19.00 for 19.15 in the Conference Room, Baden-Powell House.

Friday 24 August

Library Evening, 18.00. The Society's Library open for inspection at 62 Beauval Road, Dulwich, London, SE22 8UQ. Details of how to get there in July 1984 issue of Underground News.

Tuesday 4 September

All-day visit to Liverpool's Merseyrail Underground lines, including visits to Birkenhead North depot and Hall Road Electrical Control Room. Full details on page 84 of UN 271.

Saturday 8 September

Afternoon visit to Barking signal box, District Line. Applications, with SAE, to Mr. G.A. Finch, 3 Caverswall Street, London, W12 OHG. Minimum age 15 years. Associate members, please state age when applying.

Wednesday 12 September

Afternoon visit to the Greater London Emergency Co-ordination Centre, Kingsway (in disused Kingsway Tram Subway). Applications, with SAE, to Mr. G.A. Finch, address above.

Friday 14 September

Talk, 'London Transport Station Architecture', by Mr. O. Green, Curator, London Transport Museum. 19.00 for 19.15 in the Conference Room, Baden-Powell House.

Saturday 15 September

Morning visit to Neasden depot, Metropolitan and Jubilee lines. Applications, with SAE, to Mr. G.A. Finch, address above. Minimum age 15 years. Associate members, please state age when applying.

Sunday 16 September

London Transport Rail Tours, using trains of new 1983 tube stock. As well as covering most of the Circle Line, parts of

Continued over

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The Timetable (Continued)

the District, East London, Piccadilly, Central and Metropolitan lines, it is also planned to run into, or through, six depot yards (subject to D.O.T. approval) - Lillie Bridge, Northfields, White City, Ruislip, Ealing Common and Cockfosters. The two 8½-hour tours (which will be identical) will start and finish at Baker Street. Tickets will cost £10 each. Further details are available from the Commercial Office, London Transport, 55 Broadway, London, SW1H 0BD.

Sunday 23 September

The London Routemaster Bus Rally, jointly organised by the London Passenger Transport League and the North London Cinema Society. Flea Market and displays from 10.00 at the Odeon Cinema, Fortis Green Road, Muswell Hill, London, N.10. 'London Transport on Film' presented by John Huntley from 14.00. Admission by ticket, £2 (adult), £1 (child/OAP), available from the North London Cinema Society, Odeon Film Centre, Fortis Green Road, Muswell Hill, London, N.10. Cheques to be made payable to 'North London Cinema Society'. Please enclose SAE.

Tuesday 25 September

Library Evening, 16.00. Other details as for 24 August.

Saturday 29 September

Morning visit to Cockfosters depot, Piccadilly Line. Applications, with SAE, to Mr.G.A.Finch, 3 Caverswall Street, London, W12 0HG. Minimum age 15 years. Associate members, please state age when applying.

Friday 12 October

Talk, 'The Metropolitan Railway at Neasden' by Mr.R.Barker. 19.00 for 19.15 in the Conference Room, Baden-Powell House.

Friday 19 October

Library Evening, 18.00. Other details as for 24 August.

Friday 9 November

Talk, 'Electric Traction on Tyneside', by Mr.J.H.Price. 19.00 for 19.15 in the Conference Room, Baden-Powell House.

Summer 1985

It is proposed to operate an 8-day Society visit to France during the summer period of 1985, taking in Metro systems in Paris, Lyon and Marseilles, and also the scenic (and musical!) SNCF metre-gauge 'ligne de Cerdagne' with its pre-war electric trains that run up into the Pyrenees (near to Perpignan). Further details will be published later, but members having any comments or suggestions about this proposed trip are asked to write to the Overseas Visits Organiser, John Thomason, 12 Berestede Road, London, W6 9NP, enclosing an SAE. Please note revised address of Mr.Thomason, operative immediately.

LT, LRT or LRTB ??

From 29 June 1984, the Government took control of London Transport from the Greater London Council, three days earlier than first planned, the London Regional Transport Bill having received Royal Assent on Tuesday 26 June 1984.

The existing Board members retained with increased salary are: Dr.Keith Bright (Chairman, £46,258 to £50,000), Dr.Tony Ridley (Managing Director (Railways), £38,664 to £43,000), Dr.David Quarmby (Managing Director (Buses), £37,110 to £42,500) and Mr.Ian Phillips (Finance and Planning, £33,799 to £38,000). Mr.David Hardy has been appointed Deputy Chairman and is a chartered accountant and chairman and chief executive of Globe Investment Trust. His salary will be about £13,000 per annum.

Seven new part time Board members (annual salary each £4,500) include Miss Eileen Cole, part-time member of the Post Office Board, and chair-

man and chief executive of a market research company owned by Unilever; Miss Patricia Steel, secretary of the Institution of Highways and Transportation and council member of Age Concern in Greater London; Mrs.Helen Robinson, style director of Debenhams, former part time member of the British Airports Authority; Mr.Keith Brown, investment analyst and stockbroker - particularly interested in transport problems of the disabled; Dr.Stephen Glaister, transport specialist at the London School of Economics; Mr.Simon Jenkins, political editor of the Economist and part time member of the British Railways Board; Mr.Kenneth Joyner, managing director of Worldwide Estates and chairman of LT Property Board.

The London Transport Passengers' Committee has been replaced by the London Regional Passengers' Committee, of which Dr.Eric Midwinter has been appointed Chairman.

It is interesting to reflect that when the London Passenger Transport Board was formed in 1933 the undertaking became known as 'London Transport'. This has continued for over 50 years, despite three other organisational changes (London Transport Executive in 1948, London Transport Board in 1963 and London Transport Executive again in 1970). It will be interesting to see whether 'LT' is here to stay, or whether we shall see 'LRT' or 'LRTB'!

THE REBIRTH OF THE BULLSEYE ?

Some years ago, it became the policy, not, under any circumstances, to put wording on the blue bar of what had been re-designed and retitled by a design panel as a 'roundel', which was derived from the famous 'bullseye' symbol. This led to station exteriors without a reference to 'Underground', and a new breed of bus stop sign of the 'deaf and dumb' variety. A tradition of many years standing had been broken, and the use of the symbol as an effective means of communication between the 'undertaking' and the public was lost. An exception was station nameplates, and later the 'Underground' was restored to station frontages and stairwells, and later still, place names were applied to the bar on some bus stop signs.

A casualty of the no wording edict was the also long-standing 'NO-SMOKING' signs on Underground trains. The 1972 MkII tube stock was delivered with the inconspicuous blue bar (no red circle) no-smoking labels, and also on initial deliveries of 1973 tube stock. Soon it became evident that to make the sign stand out an additive was needed. The result was that red discs were added to the no-smoking bars, giving them an historic 'Underground' finish. Subsequently, later batches of 1973 stock received round red-on-white no-smoking labels (which were, it was said at the time, an error in design) and later 1975 cars, and also the D and 1983 stocks have round, white lettering-on-red signs, which the previous type should have been!

Now, many years later, with the bringing in of a total ban on smoking on Underground trains from 9 July 1984, the poster advertising the ban, displayed from about a week earlier, returned to the traditional NO-SMOKING sign at the heading, subsequently being used on temporary labels affixed to the interiors of former 'smoking' cars. It seems, therefore, that if impact is to be made, the bar and circle sign, with the message ON the bar, is still the most effective way. This was, of course, known to the Underground Group and for most years of London Transport, indeed until the undertaking stooped to looking for outside advice on design, rather than continuing with what had served so well, the eye-catching quality bullseye created by the masters of presentation, Ashfield and Pick. May the return of the traditional no-smoking sign show

that with the other changes of recent days, design panels are out for ever. Change for change's sake is not only expensive, but can lead to a decline in presentation.

JUNE BADEN-POWELL HOUSE MEETING

The topic of the June meeting was the Heathrow Terminal 4 loop, described by the person best able to discuss it, Mr. David Hornby, LT Civil Engineer (Development). This loop is of particular interest to railway buffs, since it will be the first Underground loop working in passenger service since that at Wood Lane on the Central Line was discontinued in the late-1940's.

Heathrow Airport has been coping with increasing air traffic since its development, and the present level has necessitated the opening of a new terminal away from the existing terminals 1, 2 and 3, served by Heathrow Central. Originally, this was projected to be at the Perry Oaks site, and indeed, the alignment of the over-run tunnels at Heathrow Central is in this direction planned for the possibility of future development. In the event, this site was deemed unsuitable and the site of Terminal 4 was chosen to be to the south and slightly east of Heathrow Central. The Perry Oaks site remains a possibility for Terminal 5, should this ever be built.

An outline of the various schemes proposed to link Terminal 4 with the existing Piccadilly Line was given. The final scheme, chosen after a cost benefit analysis, was in the form of a single loop running tunnel, such that trains from the centre of London arrive at Hatton Cross, deviate clockwise from the present tunnel round to a new station at Terminal 4, and then continue in a curve to rejoin the present station at Heathrow Central, to be renamed Heathrow Terminals 1, 2 and 3. This is a total new loop distance of about 6 km. The scheme incorporates a straight section of tunnel suitable for enlargement to a station near Perry Oaks, should Terminal 5 ever be constructed. Though this would still be somewhat distant from the terminal, a light rail system could be integrated.

As financial matters delayed the start of the LT part of the T4 loop by 18 months, as compared to the BAA commencement, a compressed timescale was conceived, being possible to achieve by simultaneous working at four sites, and at a maximum of five faces. By the end of June 1984 the tunnelling will be complete and contain almost complete track form.

Mr. Hornby described the progress of the project from its inception, aided by an excellent set of slides. These ranged from the lighter side of the project, such as the cutting of the first sod ceremony, to details of the tunnelling machines used by the contractors, Thyssen-Taywood. At no time did the actual alignment deviate from the planned alignment by more than 12 mm, over the longest run (Wessex Road to Bedfont Road, about 2 km). This was mainly a result of very accurate survey work from six intervisible roof sites around the airport and the use of a long inclined adit at the Wessex Road working site to transfer the bearing underground. The world-record-breaking speed of tunnelling achieved during the project was aided by the easy terrain of London clay. The rapid progress was also significantly aided by the use of precast concrete segments over most of the loop, which as well as being wider than the usual cast-iron width (750 mm as compared to 600 mm) require no bolts, as they are self-supporting. The contractors chose to make their own segments at their Southall works. Slides were shown of the converted warehouse in which the moulds were contained and filled by two overhead cranes, with a special mix developed for the job. At the peak of tunnelling activity, there were three tunnel

faces requiring concrete linings simultaneously. This necessitated working 24 hours a day, with three castings a day from each mould, though in general two castings a day were sufficient. The requirements of quick-setting and very high strength meant that some research into the optimum mix had to be done. A special aggregate using a precise amount of cement was developed. The most stringent LT requirements for the tolerance on the bearing surfaces (± 0.05 mm from the theoretical surface) resulted in a special finishing procedure, using steel moulds with resin parts at the joint ends. Five consultants were employed to check the product and they were on site for six months. It later transpired that the same standards were not actually achieved during the earlier construction of the Victoria and Jubilee lines, and the Heathrow extension!

Other contributory factors to the rapid progress were the use of a contractors' 'California' crossing - a raised section of track to allow contractors' trains to pass each other, optimised methods of removing the spoil and the use of the Bedfont Road shaft to serve the working to T4, rather than at Wessex Road, so that concreting and track work could proceed from Wessex Road to Bedfont Road. At Hatton Cross, the laying of cast-iron rings in an open cutting, proposed by the contractor, also furthered the progress.

Mr. Hornby then took his audience on a visual tour of the loop, describing each site with its particular problems. At Hatton Cross, the tunnel alignment is coincident with the aircraft landing approach path and there were very severe height restrictions (6 metres at the far end) which limited the plant that could be used. The ground here is water-bearing gravel and a junction had to be made to a running tunnel box section in passenger service. At Terminal 4, the station box built by BAA was at such an advanced stage that upon the arrivals of the LT tunnels (the breakthrough was featured on Thames TV) the tunnelling machines were not allowed into the station box and had to be dismantled in situ, inside a steel skin. At Bedfont Road, the site is cast-iron, tunnelled by hand due to the size and configuration of the works necessary for a ventilation shaft. At Wessex Road there are two sites - the ventilation shaft and a working shaft. A 600-ton crane was required to lower the shield into position down the shaft. In service, both the ventilation shafts will also serve as emergency exit points. At Heathrow Central, the site actually being an aircraft parking area, severe height restrictions were also imposed. In addition, a tight time schedule was operated and indeed, the site is now once again a resting place for Jumbo jets. Below ground, the step-plate junction has been constructed by hand, using cast-iron segments, serving to form a junction between the existing over-run tunnels and the new loop.

During our tour, slides were also shown of the track laying and track form. Except at points and crossings, flat-bottomed rail is being used for the first time on LT, except for experimental purposes. These rails are being laid on bow-tie sleepers with resilient rubber 'boots' to reduce the noise levels in the trains and attenuate ground-borne vibration. The complicated point and crossing work at the step-plate junction was seen, this area being far advanced, with signal cable brackets and cable gantries already installed.

Our Chairman, Brian Hardy, thanked Mr. Hornby for his most interesting, informative and enthusiastic talk. Brian concluded by telling the audience that Mr. Hornby had been specifically mentioned by LT's Director of Civil Engineering, Mr. Cliff Bonnett, during his address to the press at a recent historic lunch in the running tunnel at the Wessex Road site.

THE MARY ROSE

Having suffered with tyres slipping on wheels, thus requiring replacement wheel sets and axles, 'Sarah Siddons', LT's ex-Metropolitan electric locomotive No.12 was made 'wall' enough to operate a very successful rail tour on Southern Region metals on Saturday 7 July 1984. However, the delay in making the locomotive serviceable meant that this particular tour had been postponed from 28 April, and that scheduled for 19 May had to be cancelled, with no replacement tour planned.

Even this tour was 'touch-and-go', for some test trips arranged on LT during the previous week had to be cancelled and a last-minute 'hot-box' meant that the locomotive eventually went to the Southern at Wimbledon after the peak on Thursday evening 5 July, instead of during the morning. A planned test trip on the Southern from Wimbledon to London Bridge at midday on Friday (6th) was delayed by some two hours - London Bridge was reached at about 14.30. Here, Sarah Siddons ran round the 4-EPB unit (5117) she was hauling and then returned to Wimbledon. By then all was declared well for the next day's tour, even though a standby SR electro-diesel locomotive (73.123, named 'Gatwick Express' and in 'Gatwick' stock livery) was provided at Waterloo on Saturday morning.

On the day of the rail tour, Sarah Siddons ran 'light engine' from Wimbledon to Clapham Yard (via East Putney), coupling to the 'country' end of the six-coach set. The whole formation was then hauled by 73.120 into platform 15 at Waterloo, departure being scheduled for 09.30. The six-coach set of MkI coaches was formed (from the 'country' end):

S18909	Corridor 2nd
S4393	Open 2nd
S3843	Open 2nd
S34641	Corridor 2nd Brake
S4055	Open 2nd
S4033	Open 2nd

The coaches on the train had been chartered by various societies, and were lettered 'A' to 'F' for identification. Coach S4033 was jointly booked by this society and the LT Staff Railway Society, which, being nearest Sarah Siddons on the return journey, provided a superb musical accompaniment to the 'usual' train noises. An impressive headboard 'THE MARY ROSE' was attached to Sarah Siddons, displayed on the leading end in each direction.

The scheduled and actual timings were as follows:

	Scheduled arr dep	Actual arr dep
Waterloo (plat 15)	09.30	09.30
Queenstown Road	09.35	09.35
Clapham Junction	09.37	09.38
Wandsworth Town		09.40 09.41
East Putney	09.42	09.44
Wimbledon	09.49	09.50
Raynes Park	09.52	09.53
Motspur Park	09.53	09.55
Epsom	10.00	10.01
Leatherhead	10.07	10.07
Effingham Junction	10.14	10.14
Guildford	10.25	10.28 10.30
Haslemere (up main)	10.41 10.58	10.49 11.04
Havant	11.26 11.58	11.31 11.58
Portsmouth & Southsea	12.09	12.09
Portsmouth Harbour (3)	12.12	12.12
Portsmouth Harbour (3)	15.05	15.06
Portsmouth & Southsea	15.08	15.09
Havant	15.19	15.19
Chichester	15.35	15.30
Barnham	15.43	15.38 15.43
Arundel Junction	15.48	15.48

Pulborough	16.00	16.02
Christ's Hospital	16.12 16.22	16.16 16.30
Horsham	16.27	16.35
Dorking	16.43	16.56 17.05
Leatherhead	16.54 17.04	17.11
Epsom	17.10	17.17
Sutton	17.17	17.23
Carshalton Beeches	17.19 17.29	17.26 17.34
West Croydon	17.34	17.39
Norwood Junction	17.38	17.42
Crystal Palace	17.42	17.46
West Norwood	17.47	17.49
Tulse Hill	17.50	17.50
Herne Hill	17.53	17.54 17.56
Brixton	17.55	17.57
Victoria (platform 6)	18.02	18.04

The extended midday break at Portsmouth Harbour allowed the stock to be serviced at Fratton, for which moves were carried out by diesel shunting locomotive 09.026. On the outward journey, photographic stops were made at Haslemere (in the 'up main platform') and Havant, where at the latter, a 'run past' on the down through line took place. Return photographic stops were at Christ's Hospital, Dorking (instead of Leatherhead, because of platform repair work) and Carshalton Beeches.

Unlike the 1983 rail tours, the weather was magnificent - fitting for a superb tour, well, organised and enjoyed by all.

As a post script, the three-hour-long break at Portsmouth allowed (at extra cost) a flying visit to the Isle of Wight - to see the 'other' LT stock on SR metals! In service on this day were the following trains:

Main Service -

2-43-31+10-28-92-3
20-27-41-1+26-47-13
22-42-29-15+36-96-9

Shuttle -

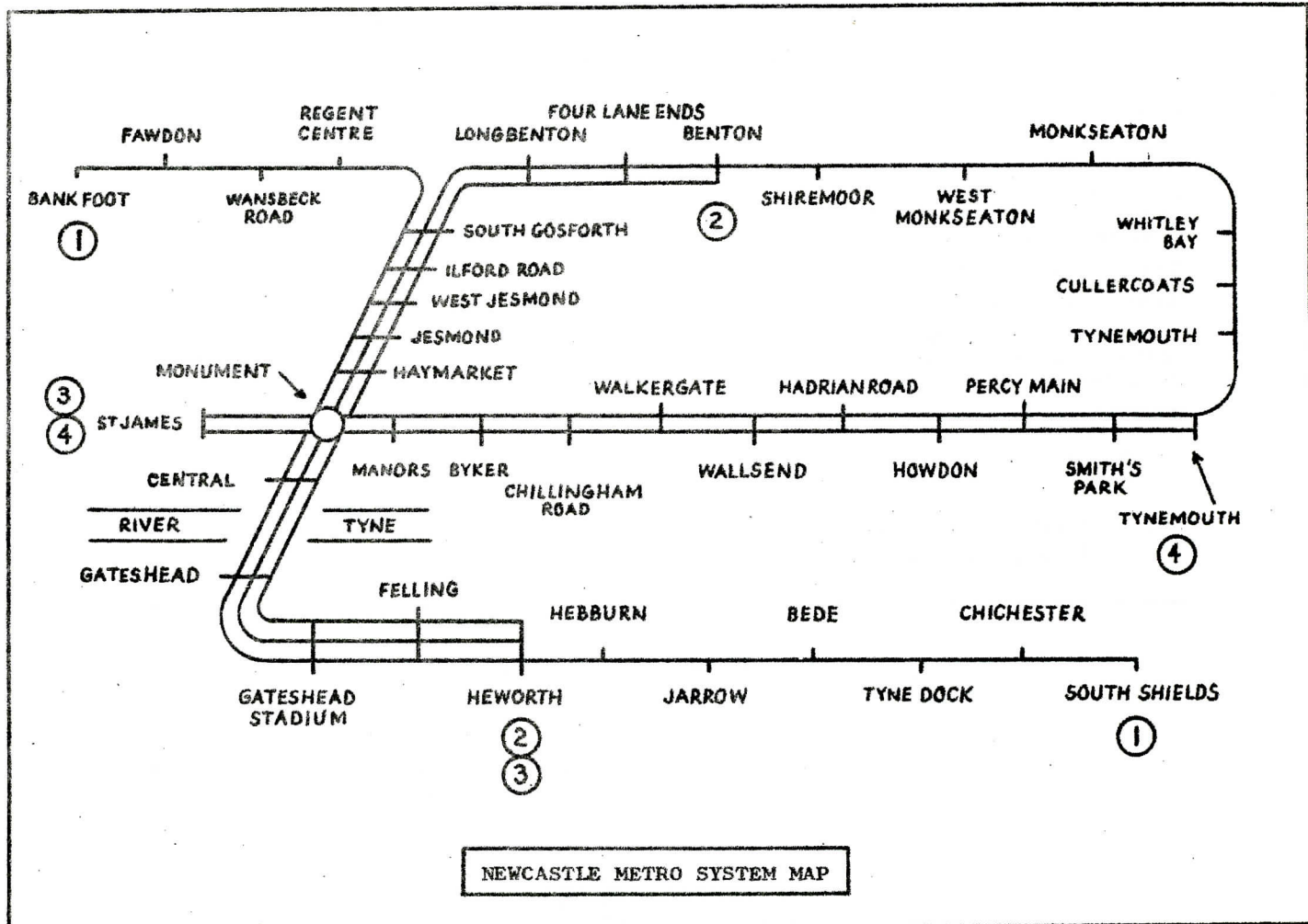
11-95-34-6+49-46-8

Additional information to that shown on page 199 of UN 263 (NF 205/83), include DM S7 of unit 034 blue & grey livery, and lime interior repaint on 2.4.84, plus trailer S44 of unit 044 due for completion this month (July).

THE NEWCASTLE METRO SYSTEM

The public opening on Saturday 24 March 1984 (the official opening took place the previous day) of the Heworth to South Shields section of the Tyne & Wear P.T.E's Metro marks the completion of the initial system, some 13 years after conception. Most readers are perhaps aware of what the Metro is in terms of underground sections, routes served and rolling stock, but it is appropriate to provide a sketch of the system to date, together with some observations made just after completion. Full details, however, can be found in various issues of 'Modern Tramway', some of which are available for inspection in the Society's Library. It must be stressed that these notes are not a full account of the Metro - indeed, it is just a broad outline to whet one's appetite.

It is ironical that much of the route served by the Newcastle Metro was once electrified in British Railways (and previous) days. In January 1963 the Newcastle-South Shields section was converted to DMU operation, as was the North Tyneside loop lines in June 1967. Now, nearly 20 years on, electric trains are running again, providing a much more frequent service than hitherto. The Metro links the North and South Tyneside lines, crossing Newcastle in underground tunnels on a north-south axis. Additionally, an east-west underground line from



St. James joins up with the southern section of the North Tyne loop, making one large circular route (not continuous, as on London's Circle Line). A branch diverges west from South Gosforth to Bank Foot over a line which last saw passenger trains in 1929.

Operating at 1,500V d.c. overhead, much of the 55 km system is double-tracked. However, small sections of single line exist, being three sections on the latest extension, Bank Foot station and its approach, and the non-passenger connection between the north-south and east-west routes between Jesmond and Manors. The system is divorced from British Rail except for a freight service which operates over Metro tracks from west of Bank Foot to east of Benton.

To enable work to be carried out on converting BR lines to Metro operation, sections of route were replaced by temporary bus services during the intervening period. A full list of Metro opening dates, also BR closure dates, is given on the next page. It will be seen in that list that the completion of the Metro was achieved in five stages. The complete network (see map above) has four lines, numbered as follows:

- 1 South Shields - Bank Foot (green)
- 2 Heworth - Benton (red)
- 3 Heworth - St. James via the Coast (yellow)
- 4 North Shields - St. James (blue)

These lines are recognised on the trains by the relevant background colour on the destination blinds (in the eyes of the London underground, one would probably consider lines 2 and 4 to be counted as short workings of the main line (3), rather than separate lines in their own right!) The full service now requires 34 two-unit trains calling for 68 out of the 88 articulated units (plus two prototypes, currently out of use) on Mondays to Saturdays. The maximum service of

34 trains operate between 07.00 and 18.00, six days a week. During evenings and Sundays after 10.30, 24 trains are in service, and on Sundays before 10.30, 12 trains are in service. The service intervals are as follows:

	Mon-Sat until 18.00	Evenings & Sundays	
		Sundays after 10.30	Sundays before 10.30
South Shields -Heworth	10	10	20
Heworth- South Gosforth	3½	5	10
South Gosforth -Bank Foot	10	10	20
South Gosforth -Benton	5	10	20
Benton- North Shields	10	10	20
North Shields- St. James	5	10	20

The train workings are generally self-contained and the following set numbers are carried:

- 101-109 Bank Foot-South Shields
- 110-128 Heworth-St. James (via Coast)-North Shields-St. James-Heworth (via Coast) *
- 129-134 Heworth-Benton

Note * this service interworks with the North Shields short workings of line 4, presumably to avoid crew changes at Monument - all trains thus pass South Gosforth, the only crew booking-on and relieving point.

For the enthusiast, by far the best way of seeing as much of the Metro as possible is by using

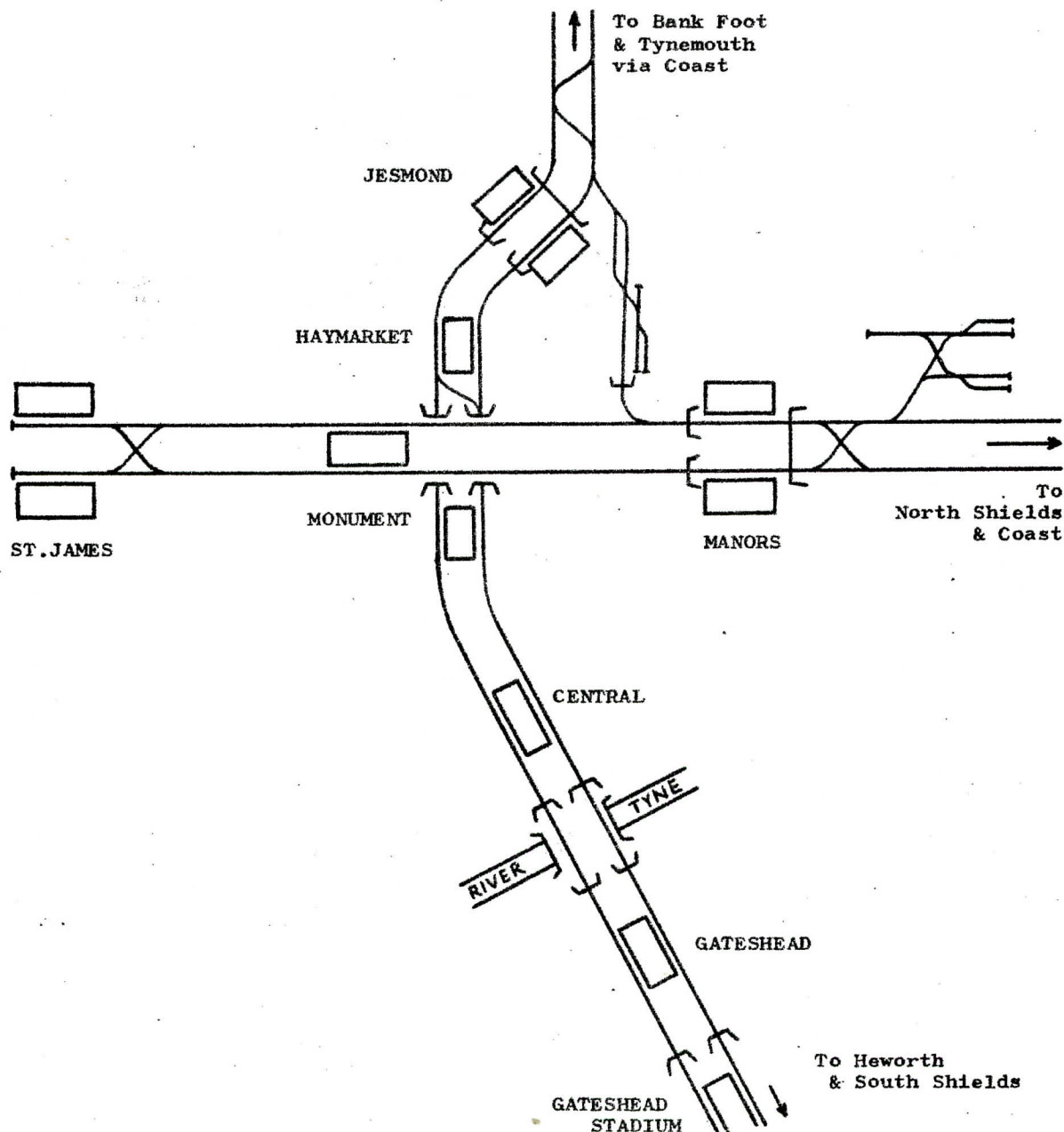
METRO OPENING DATES

Between	km	BR withdrawn	Metro opened
Newcastle Central - Jesmond		23. 1.78	-
Haymarket - Jesmond *)		-	11. 8.80
Jesmond - West Monkseaton)	13.0	23. 1.78	11. 8.80
West Monkseaton - Tynemouth	5.0	10. 1.79	11. 8.80
South Gosforth - Bank Foot	5.0	-	10. 5.81
Haymarket - Heworth †	6.1	-	15.11.81
Tynemouth - Walkergate)		11. 8.80	14.11.82
Walkergate - St.James *)	14.0	-	14.11.82
Walkergate - Newcastle Central		11. 8.80	-
Heworth - South Shields †	12.5	31. 5.81	24. 4.84
Total (km)	55.6		

Notes: * New construction
 † Part new construction

UNDERGROUND SECTIONS OF THE METRO

(Total: 6.4km)



a day rover ticket which can be purchased from Travel Centres - unfortunately not before 08.00, although they can be bought the previous day (not much use if you travel from London overnight, with an 05.45 arrival!). However, for £1.50, the ticket, when purchased, gives excellent value for money and is also valid on Tyne & Wear bus services. The enthusiast has an uninterrupted view out of the front of the train - unless fellow passengers get to the front seats first!

A selection of the more interesting features of the system include the 18-span 815-metre-long Byker viaduct, sitting 33 metres high above Byker. Although the system boasts some 55 km route length, only 6.4 km is in tunnel. The first section to be completed was the north-south 4.75 m diameter tubes from Jesmond to south of Central station. At the latter point the line leads onto the new 352 metre-long bridge across the River Tyne. It was named Queen Elizabeth II bridge after the Royal opening on 6 November 1981. On the south side of the River Tyne the line passes through twin tunnels 1.3 km long, of which 0.8 km is in twin tubes and in which is situated Gateshead station. The east-west tunnels from St. James to Manors were built in a concrete box and pass over the north-south tubes at Monument at which point there is interchange between the two routes. All of the stations built underground have a section ready constructed (but blanked off to the public) should it be necessary to increase train lengths from two units to three units in the future.

The depot for the Metro is situated at South Gosforth, best seen from trains on the Bank Foot branch, between South Gosforth and Regent Centre stations. The depot was built for the Tyneside electric stock in the early 1920's. After the withdrawal of the last BR electrics in 1967, it became a DMU depot. It was later adapted as the depot for Metro trains, BR's DMU's being evicted in 1980. The fleet of 90 Metro cars were built by Metro-Cammell of Birmingham and have been numbered 4001-4090. Units 4001 and 4002 are the two prototypes used at the Backworth test tracks from 1975 until it closed in 1980 and are currently in store, pending a decision on their future. Cars 4003-4090 were delivered between 1978 and 1981, although many were stored before arrival at South Gosforth depot. It is interesting to recall that unit 4077 was exhibited at York Museum in 1979 as part of the centenary of electric railways, and unit 4055 at Ruislip depot (LT) in July 1980 for the Fellowship of Engineering exhibition.

First impressions are of an impressive Metro system. With some single line sections, slick working on the part of the drivers is called for. On 9 April 1984, for example, the service could be described as no less than 'perfect'. No doubt problems do occur from time to time, but equally there is no doubt that Geordies have a Metro to be proud of - a visit is recommended!

Editor's Note:

As this article was being typed, it was reported that on 30 April 1984, 19 Metro units had to be taken out of service because of cracked weld joints in the bogie frames. Initially, trains on the Heworth-Benton route (red line 2) were each reduced to one unit, but because of overcrowding it was decided to withdraw the St. James-North Shields service (blue line 4) and reinstate full length trains on the former. This means that the St. James-North Shields section has a 10-minute service during the day, rather than every 5 minutes. This change was operative from 14 May.

MAGAZINE REVIEWS

The July 1984 issue of MODERN RAILWAYS contains a six-page article about the 1983 tube stock for the Jubilee Line, including its origins (for the

original Fleet Line proposal was for 60 trains), the 1973 tube stock ETT and the new 1983 stock as delivered. The article also includes details of the 1986 prototype stock and has three maps/diagrams and seven photographs, including a shot of the 1973 stock ETT on one of its rare passenger carrying trips. Elsewhere in the same issue there are colour plates of 1938 and 1983 stock trains.

FROM THE PAPERS

Daily Telegraph:

8.6.84 - A retired LT Craftsman, James Eldridge of Crawley, has been awarded £3,474 for an idea to prolong the life of the speedometer drive on Underground trains, which is saving more than £17,000 a year.

Kiernan Kelly, 54, an Irish vagrant, who has boasted of a 30-year campaign of tramp murders, was given his second life sentence within three weeks at the Old Bailey yesterday. In a written confession, Kelly said his favourite method of killing was to push victims under Tube trains.

A Mori poll, conducted last week, shows that 64% of Londoners are against abolishing the GLC.

The GLC proposes an LT fares freeze until March 1988, with a rise from £198 million to £217-million in subsidies for fares alone. However, the GLC is due to lose control of LT in July.

13.6.84 - The Government yesterday introduced clauses into the London Regional Transport Bill to allow travellers without tickets on London's buses and tubes to be charged a £5.00 penalty fare on the spot, or ten times the unpaid fare if greater. Travellers would not face a penalty fare unless they had had reasonable opportunity to pay the proper fare or obtain the right ticket. If unable to pay on the spot, they would be able to pay within 21 days.

18.6.84 - After 80 years operation, New York underground is experimentally introducing a stand-on-the-right rule on escalators at Grand Central station on No.7 line. There are some doubts whether New Yorkers will obey this rule!

19.6.84 - The House of Lords yesterday gave a third reading to the London Regional Transport Bill.

20.6.84 - Smoking will be banned on all London tube trains from 9 July, 'in order to provide a cleaner and more attractive travelling environment'.

22.6.84 - The GLC has ordered a day of free Sunday travel on LT's trains and buses on 1 July, to mark its loss of control over London Transport.

25.6.84 - The London Regional Transport Bill is expected to receive its final reading in the Commons tonight.

28.6.84 - The annual report of the London Transport Passengers' Committee says that the Travelcard has been an enormous success, and that the spiral in the decline and use of LT has at last been halted and reversed.

The seven politically-appointed members of the London Transport board will lose their jobs as soon as the Government wrests control of LT from the GLC, probably next Monday. They are Messrs. Arthur Latham, Ernest Rodker, Larry Smith, Kerry Hamilton, John Palmer, Miss Merle Amory and Mrs. Eleanor Lewin.

The London Regional Transport Bill received Royal Assent on Tuesday evening (26.6.84) and thus became an Act.

On the 'day of action' yesterday in support of the miners' strike, there was an average 50% cut in British Rail commuter services into London, but the London Underground ran a normal service, and only three bus routes were affected.

29.6.84 - Last night the Government announced that it would take over London Transport from today instead of waiting until Monday 2 July, putting in doubt the plan to give free travel to children on Sunday 1 July.

30.6.84 - A memorial service for the late Poet Laureate, Sir John Betjeman, was held in Westminster Abbey yesterday and attracted a congregation of some 2,000.

LETTERS TO THE EDITOR

Sir,

East London Railway to Liverpool Street

The question of the opening of the East London Railway to the Great Eastern terminus at Liverpool Street has been raised again owing to an ambiguous footnote in 'The London, Brighton & South Coast Railway' by J.T.Howard-Turner.

The passenger service definitely began on Monday 10 April 1876; the first train arrived at 05.13 and left at 05.18. An official opening ceremony took place three days earlier when a special train conveying Directors and Officials ran to Brighton and back. All trains were LB & SC until the Great Eastern provided the service from 1 January 1886, but the LB & SC continued to run trains to and from Shoreditch.

Yours sincerely,
H.V.Borley.

Bexhill, Sussex.

Sir,

Piccadilly Line trains at Turnham Green

In the Engineering Works section of UN 271, page 79, it is stated that Piccadilly Line trains never normally use the District Line platforms at Turnham Green, except in special emergencies. For the record, this is incorrect, as on Sundays, after a through service between Rayners Lane and central London has begun about 13.30, every third Rayners Lane train (i.e. one per hour) and occasional Heathrow trains use the District tracks between Acton Town and Hammersmith, to keep the crews' route knowledge up-to-date.

Yours sincerely,
D.F.Croome.

Perivale, Middlesex.

POINTS OF INTEREST

Nigel Hyde writes:

An article 'S-Bahn Goes West' in the April 1984 Geographical Magazine, is complemented by the note on the Berlin S-Bahn in the May edition of MODERN RAILWAYS. Interesting points include: the East German railway system still uses the name DEUTSCHE REICHBAHN (German Imperial Railway), despite 'a professed socialist state'; The S-Bahn fare in East Berlin is about 5p and a 'scouts' honour system of self-cancellation is in use - inspectors are never seen!; the North-South S-Bahn tunnel under East Berlin is to be maintained in usable condition - the last train ran through on the night of 8/9 January 1983.

LURS members who have the chance to visit Berlin will surely find the experience most interesting. Although I regret not taking the opportunity to visit Berlin in 1961, just after the wall had been built, I have been fortunate as part of my professional duties to lead parties to both East and West Berlin in 1976 and 1983, and would go again if the occasion arose.

REVIEWS

THE LONDON UNDERGROUND - Three-fold diagram of lines and fare zones. Ref: A.84. Issued free by London Transport.

This new edition of the card diagram of lines is arranged in the same way as those for 1983, but the cover displays a striking impression of a 1983 stock tube train, and at the foot of the cover are the words 'Bakerloo Line trains again running to Harrow and Wealdstone'.

Internally, the usual underground diagram is flanked again by advertisements below and to the right, except that the top right hand panel is replaced by a list of telephone numbers for LT and BR travel information. On the diagram itself, peak-hour Bakerloo trains are shown to Harrow & Wealdstone, and there is a panel with full details of the 14 stations that are not open throughout normal traffic hours (stations closed all day on Saturdays and Sundays are denoted by special symbols). From Harrow & Wealdstone to Watford Junction continues to be shown as a BR line; the new Piccadilly Line extension is shown 'under construction', with the station called 'Heathrow Terminal 4'. The designer's name is shown as 'FWT Cartography, 3.84'.

DFC

LONDON'S INDUSTRIAL ARCHAEOLOGY No.3. Published by the Greater London Industrial Archaeology Society. Size 210 x 297 mm, 56 pages, soft covers. Fully illustrated. ISSN 0142-6273. Price: £1.95 (plus 20p postage and packing). Available from Tom Smith, 74 Lord Warwick Street, London, SE18 5QD. Cheques and postal orders to be made payable to 'GLIAS'.

This third edition of the GLIAS occasional journal contains a number of short essays illustrating the work of the Society. The essays deal with:

- (I) The Hatcham Ironworks, New Cross.
- (II) The Southwark Bacon Drying Company.
- (III) Morris and Company at Merton Abbey.
- (IV) Edge Runners in Walworth.
- (V) Surrey Commercial Docks - the building of Canada Dock and a dry dock for the repair of lighters.
- (VI) Ingersoll-Rand Imperial Type 10 air compressors in London's Docklands.
- (VII) Notes on Windmills in Greater London.

There are no essays of direct London Underground interest, but the first essay deals with the locomotive works of George England and Co., which produced 150 locomotives between 1849 and 1872, including seven for the Festiniog Railway. Squeezed between Kender Street and Pomeroy Street, New Cross, without rail or road connection, this was a most improbable site for a locomotive works, and the products had to be moved away by wagon and teams of horses. There was a fascinating hand-driven overhead crane of 1853 vintage, which survived until 1982, but was then destroyed. George England was an autocratic and short-tempered employer. When his workmen successfully pressed for a 4.30 pm finishing time on Fridays, he continued to pay their wages at 5.00 pm. He retired in 1869 and probably survived until the 1890's. His son died in 1870, and the works were closed in 1872. The proprietor's house 'Hatcham Lodge' and a row of cottages in Kender Street are the only surviving buildings.

In the other essays, No.III deals with the works established by William Morris (1834-1896) to make decorated tiles and stained glass, and to weave, dye and print textiles, No.IV with grinding herbs and spices by grindstone on edge,

whilst No.VII includes a gazetteer of all surviving windmill remains in Greater London. The essay on Canada Dock shows the East London Railway tunnels on the plans.

All essays are fully illustrated with photographs, elevations, maps and plans - the whole publication is of great interest and is recommended.

DFC

SOCIETY SECTION

Society Sales:

Available now from the Sales Stand, or by post from the Postal Sales Manager, is the new edition of METROPOLITAN ELECTRIC LOCOMOTIVES by Ken Benest. With 96 pages, much expanded text, many new photographs and colour covers, the price is £3.50 (post free to members).

By the time this journal is read, the 1984/85 edition of LONDON UNDERGROUND ROLLING STOCK should be available. With 96 pages, it contains a new selection of photographs, details of the 1986 prototype stock on order, Post Office tube railway, as well as the usual features. Written by Brian Hardy and published by Capital Transport, the price is £3.50 (post free to members).

Underground No.13

The above publication was distributed to members with the July issue of Underground News. We have been advised that some copies may have too many pages, while others may have too few. In the case of the former, members are asked to rectify this themselves, but those having too few pages are asked to return same to: Mr.R.J.Greenaway, 26 Fishery Road, Boxmoor, Hemel Hempstead, Herts., HP1 1ND, for a replacement copy.

Corrections to UN 271

On page 80, in the review of the June 1984 issue of RAILWAY MAGAZINE, add 'not' between 'were' and 'crossovers' in 34th line.

Corrections to UN 270

In second column of page 64, third line of 2nd paragraph of 'Other Notes', '£1.40' should read '£1.20'.

In second column of page 68, under Berlin U-Bahn beginning of last sentence should read, 'Above ground at this station'

Amplification in UN 269

Dates quoted for the withdrawal of goods services are the first day of 'no service' (2nd column of page 53).

Exhibition of 1940's Posters

Members may be interested to know that the City Museum and Art Gallery in Portsmouth has a display of 1940's posters on loan from the LT Museum, covering the period of the war and the rest of the decade, until 19 August 1984. Open daily 10.30 to 17.30. Admission: 20p adults, 10p child. Further details available by telephoning 0705-827261. Ten minutes walk from Portsmouth & Southsea station.

ROLLING STOCK ALTERATIONS

AMEND for May 1984 - 1972 MkI stock DM 3230 ex-Ruislip by road on 16th was taken to Thomas Hill of Derby and NOT as shown.

1967 Tube Stock

From Northumberland Park to Hainault

3076-4076-4176-3176 1st

1983 Tube Stock

From Metro-Cammell, Birmingham, delivered to Neasden

3612-4612-3712 17th

Entered service, Jubilee Line

3611-4611-3711 8th

3612-4612-3712 28th

CO/CP Stock

From Ruislip to Quainton Railway Society by road for preservation

013063 29th

53028 30th

D Stock Ventilation Modifications

Units	Ealing - Ruislip	Ruislip - M.C.W.
7006+7113	11.6.84	12.6.84
7090+7077	18.6.84	19.6.84
7018+7065	25.6.84	26.6.84
7017	28.6.84	

Units	M.C.W. - Ruislip	Ruislip - Ealing	Acton - Ealing
7506			7.6.84
7002+7009	13.6.84	14.6.84	
7026+7107	20.6.84	21.6.84	
7122+7111	27.6.84	28.6.84	

Note: Unit 7506 marks the completion of the D stock double-cab units by Acton Works.

Miscellaneous Movements:

L44 Lillie Bridge to Acton (overhaul and mods) 7th

L30 Acton to Ealing Common (ex-overhaul, and 'A' end buckeye mod) 15th

Service Stock:

Scrapped at Ealing Common by Booths of Rotherham

F310 F319 F325)
RW458 RW465) 15th
RW469 RW485)

From Ruislip to Quainton Railway Society by road for preservation

FB578 28th

Changes to Unit Formations

From	To
<u>1962 Tube Stock</u>	
1656-2656-9657-1657	1656-2656-9741-1657

Renumbering of Stock

1962 Tube Stock

NDM 9741 to 9657

NDM 9657 (original) withdrawn, collision damage

Units to Acton Works for Overhaul:

Central	1418-2418-9419-1419	4th	(b)
Victoria	3017-4017-4117-3117	6th	(c)
Metropolitan	5184-6184-6185-5185	8th	(b)
Northern	1102-2102-1103	12th	(a)
Jubilee	3447-4547-3547	13th	(d)
Central	1466-2466-9467-1467	18th	(b)
Metropolitan	5580-6580	19th	(d)
Metropolitan	5553-6553	21st	(d)
Northern	1096-2096-9097-1097	21st	(a)

Piccadilly	341-541-141	22nd	(d)
Metropolitan	5180-6180-6181-5181	26th	(b)
Northern	1110-2110-1111		(a)
Jubilee	3257-4257-4357-3357	28th	(d)

Units from Acton Works after Overhaul:

Central	1604-2604-9605-1605	4th	(b)
Victoria	3003-4003-4103-3103	6th	(c)
Metropolitan	5182-6182-6183-5183	8th	(b)
Northern	1046-2046-1047	12th	(a)
Jubilee	3454-4554-3554	13th	(d)
Central	1410-2410-9411-1411	18th	(b)
Metropolitan	5572-6572	19th	(d)
Metropolitan	5575-6575	21st	(d)
Northern	1072-2072-9073-1073	21st	(a)
Piccadilly	359-559-159	22nd	(d)
Metropolitan	5118-6118-6119-5119	26th	(b)
Northern	1066-2066-1067	26th	(a)
Jubilee	3248-4248-4348-3348	28th	(d)

NEWSFLASHES

NF 100/84 - The memory of Lord Ashfield, first chairman of London Transport, was honoured on Thursday 7 June in the presence of four of his successors, when Mr. Dave Wetzel, chairman of the Greater London Council's Transport Committee, unveiled a blue plaque at Lord Ashfield's former home in Mayfair. The ceremony, at 43 South Street, W.1., was attended by LT's present chairman, Dr. Keith Bright and former chairmen Sir John Elliot, Sir Kenneth Robinson and Mr. Ralph Bennett. The Hon. Marian Barford, Lord Ashfield's daughter, was also present, with other members of the family. After a career in transport in the United States, the then Albert Stanley returned to Britain, where he had been born, and soon became chairman and managing director of the Underground group of companies. Knighted in 1914, Stanley joined Lloyd George's government as President of the Board of Trade. This work earned him a peerage, as Baron Ashfield of Southwell, in 1920, when he returned to the transport industry. In 1933 Lord Ashfield became the first chairman of the newly-formed London Passenger Transport Board, which united London's buses, Underground systems and tramways, under the London Transport banner. He continued in the post until 1947 when he was appointed a founder member of the British Transport Commission. Lord Ashfield died in 1948 at the age of 74.

NF 101/84 - All children aged 14 and 15 who travel by bus or Underground will need Photocards from Monday 3 September, to qualify for child fares. This is part of LT's campaign against fraudulent travel. An estimated £6-million is lost every year through abuse of child fare concessions by young adults and the introduction of the child Photocard should help to reduce this figure substantially. Under the new arrangement, which applies to visitors to London as well as residents, children aged 14 or 15 will need to produce a valid Photocard when buying ordinary single or return tickets, Red Bus Rovers or One Day Travelcards. Children under 14 years of age will not need a Photocard for single and return tickets, but they can obtain one if they wish, particularly if their correct age might be doubted because of their build or general appearance. Children of all ages who want to buy child-rate Travelcards or season tickets sold outside Greater London will also need the new cards after 3 September. Photocards for children will be free and available from 23 July from all post offices and sub-post offices in the area served by London Transport. To obtain one, a child must apply in person and will need to take a passport-size photograph (colour or black-and-white) and some proof of age such as a birth certificate, passport, medical card or naturalisation or entry certificate. The new arrangements will benefit young people and LT staff. Parents and school author-

ities have asked LT in the past to devise a means of identification to help avoid the embarrassment which can arise when a bus conductor or ticket clerk challenges a child's claim to be under 16, because the child looks older.

NF 102/84 - Further to the notes on pages 65-67 of UN 270 (1986 prototype tube stock), it is reported that the unsuccessful Continental tenderers were CIMT of France (who build Paris Metro rolling stock) and Wagon Union of West Germany.

NF 103/84 - 1973 tube stock trailer 682 re-entered service on 16.4.84, fitted experimentally with disc brakes and hollow axles.

NF 104/84 - Further to NF 78/84, the use of GLC Senior Citizens' travel permits on Mondays to Fridays from 09.00 instead of 09.30, is to continue.

NF 105/84 - From Sunday 1 July 1984, adult Red Bus Rover tickets valid for one day issued at Underground ticket offices were of a new type. The tickets are sold undated and the passenger has to validate it by rubbing the edge of a small coin over the surface of the appropriate 'boxes', thus revealing the day, month, date and sex of the user.

NF 106/84 - A road/rail shunter built by Unilokomotive Ltd. of Galway, Eire, was demonstrated at Ealing Common depot on 2 and 3 July 1984. During the demonstration it successfully hauled a train composed of all useable service stock vehicles in the depot, formed as follows:

'Unilok' - B558 - F321 - JC683 - C606 - DT81 - DL81 - HW418 - WPW100 - RW471 - L134 - L135 - F340 (with concrete breaker) - RW477 - RW474 !!

LT's own depot shunting 'Unimog' (L84) repeated a similar exercise successfully the following day (4.7.84).

NF 107/84 - It has been reported that BR are to reopen the Snow Hill link, connecting Bedford, Luton and St. Albans with the south of England. The cost of the project would be about £10-million and services could be running in about three years time.

NF 108/84 - First noted on 4 June was that part of the permanent way sidings, immediately behind No.1 platform at Rayners Lane, had been lifted. Currently, the remaining two tracks end with timber baulks, temporary red lights and two red flags stretched across the ends of the tracks.

NF 109/84 - Also observed in early-June, on stations between Rayners Lane and Uxbridge, a new type of warning notice at platform ends. The top 2/4 of the notice is divided into two parts, both parts being on a white background. The left hand side has a roadway type warning sign with a red circle surrounding a black figure with a red diagonal line across the circle. Underneath is written, 'Passengers must not pass this point'. On the right hand side is a yellow triangle with a black electric zig-zag symbol inside. Underneath is written, 'Danger, Electrified Tracks'. On the remaining part of the notice - written in white letters on the traditional red background is, 'The Bridge or Subway must be used by staff to cross the tracks. All staff working on the track must comply with safety instructions. Do not step on any rail'.

NF 110/84 - Following successful experiments with flat-bottom rail on pre-stressed concrete sleepers at Neasden, Buckhurst Hill and Westbourne Park, LT intend to convert open sections of track to this new method, doing away with the present system of bullhead rail on wooden sleepers.

NF 111/84 - Two bridges on the Metropolitan Line's Chesham branch, one at Waterside, the other at Moor Road, are in need of attention, with a 15 mph speed restriction to imposed over them from the middle of this year, with a ban of

all trains using them after 1986. So far, Buckinghamshire County Council (through whose area the Chesham branch runs) and the Government have declined to make any contribution to the £1.25-million that would be required to repair the two bridges.

NF 112/84 - At the end of June, plans were announced for a 'Superstore' between the LT and BR tracks between Finchley Road and West Hampstead. The building work would not only include an Asda superstore, but also industrial space and offices. The site is bounded by LT stations of Finchley Road and West Hampstead, and BR stations of Finchley Road & Frognal and West Hampstead (formerly West End Lane).

NF 113/84 - Metropolitan Line guard, Mike Willis, has become the new 'Scrabble' champion of Britain, beating the defending champion into fourth place. One of the words he used was 'detrain'! He also made several appearances on ITV Channel 4's evening 'Countdown' programme.

NF 114/84 - It is reported that the last of the Paris Metro 'Sprague' stock, withdrawn from service in April 1983, are being offered for sale - motor cars are being offered at about £10 each!!

NF 115/84 - It is reported that some cabs on the Victoria Line 1967 tube stock are being repainted in anything but standard colours. So far noted are 3073/3173 (bright green) and 3077/3177 (chocolate brown).

NF 116/84 - As reported elsewhere in this journal, temporary no-smoking labels were affixed to most former 'smoking' cars ready for 9 July. However, on the Bakerloo Line, three such cars (2196, 2202 and 2216) of 1959 stock were seen with the standard type of label.

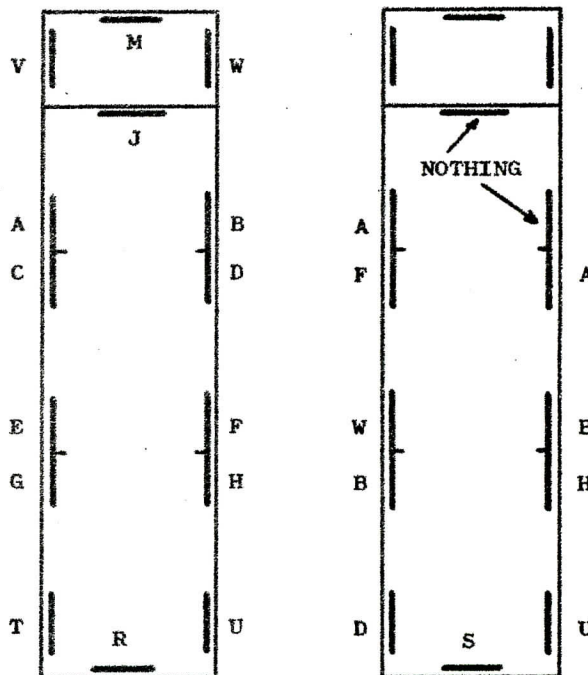
NF 117/84 - A four-car DMU was chartered by the Aylesbury & District Railway Passengers Association on 9 June 1984, for a return journey between Marylebone and Milton Keynes, to encourage the development of a regular passenger service over this route. The train was well filled and beyond Aylesbury a speed limit of 25 mph was imposed. Beyond Quainton Road the route branching off to Verney Junction could be clearly seen. At Verney Junction itself very little is left and the Metropolitan bay platform can only just be seen. It was interesting to note at the closed station of Winslow the platform packed with spectators waving placards pleading for the restoration of their train service.

NF 118/84 - Three underground tube train 'cabs' have been privately purchased for preservation. These are: 1960 stock DM 3911, 1938 stock DM 11242 and sleet locomotive ESL104.

NF 119/84 - With the re-signalling and track alterations on the Metropolitan and Jubilee lines at Finchley Road on Sunday 8 July, the last passenger train to use the Finchley Road 'loop' occurred on Friday morning, 6 July. The following day, both ends of the loop had been severed.

NF 120/84 - In Liverpool, class 508 EMU's (transferred from the Southern) are now entering service on the Wirral Line, replacing class 503 EMU's that were built in two batches (1938 and 1956). To date, the class 508 units are operating only in 3-car formations (including during the peaks) on the Wirral, and the stock being replaced is being taken to Cavendish Dock sidings, Birkenhead, for eventual scrapping.

NF 121/84 - Observation of 1973 stock DM car 114 in June 1984 revealed that the car has been made up from 'bits and pieces' of other cars. This was most apparent with the doors, each having identification letters. The differences noted were as follows:



Standard
'A' End
1973 Stock
Door
Arrangement

1973 Stock
DM 114

TAIL-PIECE

Observed recently at Northwood station on the Metropolitan Line, an LT apology to passengers for delays caused by a dog falling under a train.

The notice referred to 'PEKE HOURS'

Underground News is printed and published by the London Underground Railway Society. Correspondence for this journal should be addressed to the Editor Underground News, 'Heidi', 13 Castleton Road, Eastcote, Ruislip, Middlesex, HA4 9QQ. When writing to any Society Officer, please quote your membership number on all communications, including applications for visits. Members requiring a reply to their correspondence are asked to enclose a stamped addressed envelope.

The last full list of Society Officers' addresses can be found on page 82 of UN 271, plus the amendment on page 86 of this issue.

For non-receipt of journal and changes of address, correspondence should be addressed to the Despatch Officer, 67 Weltmore Road, Luton, Bedfordshire, LU3 2TN. Members are asked to wait until the 1st of the next month, before writing about journal not received.

Members are asked NOT to use the telephone when communicating with Society Officers, nor make a personal house call, unless previously invited to do so.