

# UNDERGROUND NEWS

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## THE TIMETABLE

### Monday 2 June

Library Evening, 1830. The Society's Library open for inspection at 9A Dunrobin Court, 389 Finchley Road, London, NW3 6HE.

### Friday 13 June

Programme of Cine-films by Mr.D.M.Hibbert, including 'The Met. in the 1960s' and 'Steam on L.T. Service duties'. 1900 for 1915 at Hammersmith Town Hall.

### Tuesday 1 July

Library Evening, 1830. Other details as for 2 June.

### Sunday 6 July

LURS members are invited to join in the North London Transport Society's second annual Memorial Walk of the 'Northern Heights' extensions from Finsbury Park to Alexandra Palace, Edgware and beyond. The walk will start from Finsbury Park station at 1030 and a break will be made at Highgate. The walk will then continue to Alexandra Palace, from where the NLTS's RT bus will take participants to Mill Hill (The Hale), where a walk will then be made over the section to Edgware. Having inspected the station site at Edgware, participants will then rejoin the RT for the ride to Aldenham via Brockley Hill. The participants will then return in the RT to Finsbury Park. For full details, please send SAE to the NLTS Trips Officer, 34 Pelham Road, Wood Green, London, N22 6LN.

### Friday 11 July

Talk, 'The History and Development of the L.T. Tube System' by Mr.D.F.Croome. 1900 for 1915 at Hammersmith Town Hall.

### Saturday 12 July

Morning visit to Ruislip depot. Applications, with SAE, to Mr.G.A.Finch, 161 Valetta Road, London, W3 7TA.

### Thursday 17 July

All-day visit to the Bicester Military Railway. Participants to make their own way to and from Bicester. Applications, with SAE, to Mr.G.A.Finch, 161 Valetta Road, London, W3 7TA.

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## APRIL HAMMERSMITH MEETING

At the Society's April Hammersmith meeting, we were pleased to welcome back Mr. J. Putnam, London Transport's Commercial Advertising Manager, who talked about advertising and bill-posting on London Transport.

Mr. Putnam first outlined the sphere of advertising as a whole and stated that some £200,000,000 was now spent per year on advertising in this country. Although it was a popular belief that most of this amount was spent on television, it was the newspapers where most money was spent, accounting for about 60% of the total. The sphere of newspapers not only included national newspapers but regional and local editions as well. The television then accounted for just under 40% of the money spent, with only a very small amount left for other forms of advertising - radio and posters.

London Transport's advertising accounts for about 10% of all advertising throughout the country and 40% of all in the London area. Mr. Putnam then explained the difference between 'marketing' and 'advertising', the former being money spent on research before a product is actually produced, and the latter being the completed article shown to the public.

Mr. Putnam then showed a series of colour slides about advertising on LT's buses. It was explained how it was aimed at several 'groups' of people that observed the adverts during the course of a day - commuters, tourists and housewives. Leisure activities are catered for in the form of advertising for theatres, television programmes and cinemas. Each bus garage has only one or two persons employed to apply the adverts, both inside and outside of buses, the work being done at night. The instructions for the applying of bus adverts now comes from a computer. To lengthen the life of exterior bus adverts to about six months, new vinyl material adverts are being tried out, currently by 'Rothmans', (the 'T' shape), 'Harrods' and 'Selfridges'. Some bus shelters are being fitted with advertisements and it is ultimately intended that some 9,000 will have these.

With £8½ million per year currently being made from advertising on London Transport, Mr. Putnam stated that about 30% of this total came from the buses and 70% from the Underground. A film was then shown about advertising on the Underground, depicted as 'A Journey to the Centre of the Earth'. The various methods of advertising on the Underground were illustrated and described, the smallest form being the 'car cards' in rolling stock. Larger adverts on stations comprised the 4-sheet, 16-sheet for station tunnel walls, and the largest of all, the 48-sheet. Mr. Putnam stated that there was 147 staff employed whose job it was to post advertisements, 30 of them being on night work who were mainly concerned with working across tracks on station tunnel walls, there being some 6,000 of these positions. Glass panels in lift and escalator frames are currently being phased out in favour of plastic-covered adverts. Different methods were also being investigated for the larger size of adverts. It is understood that London Transport will be first to use holograms in advertising later on this year, at a station yet to be decided.

Mr. Putnam brought the evening to a close by answering questions from the audience. One of the points raised was illuminated adverts. Since 1967 some spaces have been illuminated from behind, being cheaper to produce as no card mounting is required. However, on the D stock, adverts are not illuminated from behind; on this stock, the plastic coated adverts are illuminated from the front by fluorescent tubes.

The audience then showed its appreciation to Mr. Putnam for giving us another informative and entertaining talk.



## LONDON TRANSPORT STATION LIFTS

A much neglected subject in the pages of this journal is that of lifts (called by some enthusiasts as 'vertical trams'). It is hoped to partly put this right by the following brief survey of the lifts serving passengers at London Transport stations.

The current supply for LT lifts is 650V d.c. and comes from certain substations to certain station switchboards. In each case, two switches are provided; a trunk switch, to allow the supply of current from the substation to be isolated, and a selector switch, which allows alternative current feeds to the lift machine room switch board.

With the exception of the high-speed lifts at Hampstead, the doors at landings and lift gates are air-operated, the compressed air being supplied from the air main, but at Angel and Wapping, compressors are provided in the lift machine rooms there to supply the air. There are, however, two stations (Belsize Park and Caledonian Road) that have lift gates that are hand worked, where the lift operator stands.

The passenger capacity of lifts normally varies between 40 and 50 persons, with the exact number normally displayed inside each vehicle. The high-speed lifts at Goodge Street and Hampstead have variable capacities for between 22 and 30 passengers, and again the exact number is displayed inside the cars. Interior lift lighting is normally by fluorescent tubes, although some older lifts still have tungsten lighting.

Lift machine rooms are normally to be found above the top landings, except for Bank, Regents Park, Holland Park, Lancaster Gate and Queensway, where they are located below the lower landing. Where a lift stalls in the shaft, facilities exist whereby passengers can be transferred to another lift, side by side, through a normally-locked emergency door, except, of course, for lifts working in single shafts. Where a lift stalls due to a current failure, staff are trained in handwinding, which is carried out from the machine room, with a minimum of four persons.

Lifts stop automatically at landings, slowing down at about a car's length from the landing, but safety devices are incorporated which will cause the lift to stop. Broadly, these can be summarised thus:

Slack cable switch - operates when the main lifting ropes become slack.

Speed governor - operates if the lift attempts to travel too fast.

Failure of current - brakes automatically apply.

Normal limit switches - stops lift automatically at landings and applies brakes.

Extreme limit switches - stops lift automatically if it attempts to over-run normal limits.

Gate switches - with the gates open, or partly open, this prevents the lift from being started.

### Manual lifts

The oldest types of Otis lifts have controls as follows: This comprises a circular dome with two open and close levers, one for each gate, an emergency stop switch and a start switch (diagram 1). In place of a starting switch on the dome, some have a separate handle controller (diagram 2). Belsize Park and Caledonian Road still have lifts which have hand-operated gates where the lift operator stands, and has only a handle controller (diagram 2), with a lever for the rear gates. The lifts at Holland Park and Holloway Road also have dome controllers in the ticket offices there (diagram 1), departure from the top landings being controlled by the booking clerks. Kennington ticket office also has a dome controller, but this is not now used.

Modernised Otis lifts are provided at Aldwych (both lifts), Covent Garden (Nos.1 and 2), Elephant & Castle (both Northern), Holland Park (both) and Lancaster Gate (both). These comprise control boxes at landings (diagram 4) and inside the lift car (diagram 3).

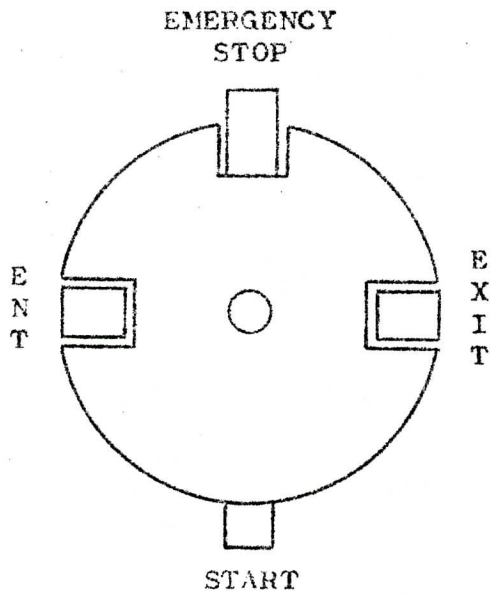


DIAGRAM 1: Dome Controller.

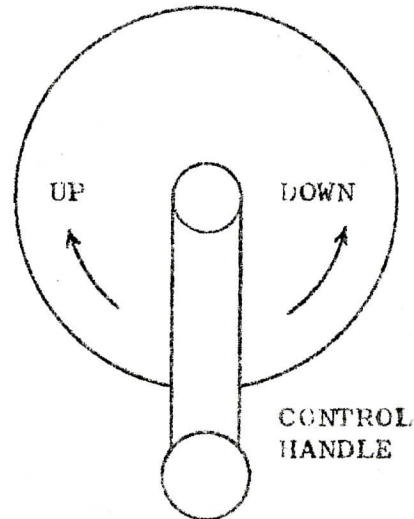


DIAGRAM 2: Separate Control Handle.

DIAGRAM 3: Modernised Otis Lift Control box inside car.

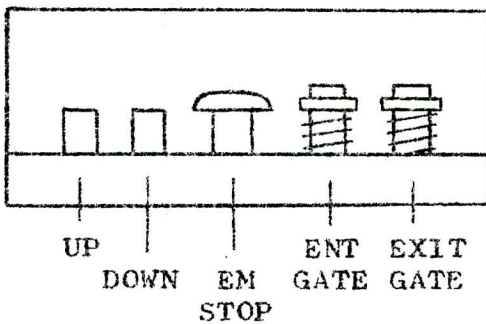
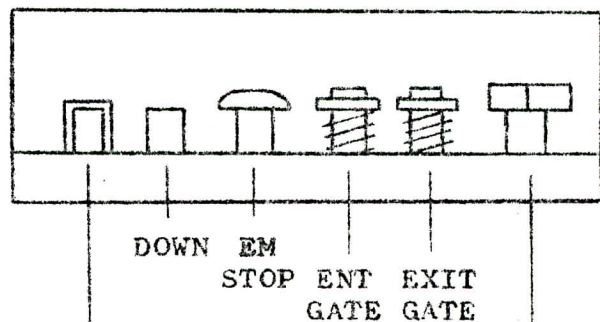


DIAGRAM 4: Modernised Otis Lift Control box, on top landings.



EMERGENCY  
CALL-UP  
BUTTON

CHANGEOVER  
SWITCH (4 positions):

1. Off
2. Landing control
3. Car Control
4. Lift Engineer's use only



### Automatic Lifts

Two automatic lifts were installed at Earls Court in 1932, which became operative from 9 October of that year, and although broadly similar to the Standard Otis lifts, additional equipment is provided. For the passenger, at both landings, signs illuminate 'Stop - Gates Closing' above the gates and this is preceded by a loudspeaker warning 'Stand clear of the gates'. Should these loudspeakers fail, a warning bell is provided to operate in lieu. An emergency plunger is provided in the lift for passenger use which rings an alarm bell at both landings and causes an indicator light to illuminate at the top landing. These lifts were taken out of use after 13th April 1980, for modernisation.

Similar automatic lifts to those at Earls Court were installed at Strand in 1935, but these were removed when the station closed in June 1973 for rebuilding.

There are three stations on the Underground that have high-speed automatic lifts. These are at Goodge Street (three installed for use from March 1937), Hampstead (two installed for use from April 1954) and Queensway (two in 1956). Those at Hampstead and Goodge Street were manufactured by Otis, whilst those at Queensway, now manually controlled, were manufactured by Wadsworth. The lifts at Hampstead travel the deepest lift shaft on the Underground system, which is 181 feet, and the high speed lifts at this station are also the fastest of the three installations, and make the journey in just 18 seconds. Illuminated signs are in use at both Goodge Street and Hampstead, and those at the latter have additional facilities being in the deepest shaft - telephone communication between the upper and lower landings and from the lift to the ticket office. High-speed lifts, similar in most respects to those at Queensway, were installed at Oxford Circus in 1942, but these were taken out of use when Victoria Line construction work commenced in 1966, and anyway were for outgoing passenger traffic only, from the Central Line to Argyle Street.

### Current developments and the future

The programme of replacing lifts by escalators goes back to 1914, when the Bakerloo Line lifts at Oxford Circus were replaced by escalators. A list of such replacements appears on page 211. However, recent replacements have been at Waterloo (after 17.3.73) and South Kensington (after 20.10.73). The lifts at South Kensington were unique, in that there were three landings. From street level, the next landing was 58.5 feet down to the eastbound Piccadilly Line platform. Another landing, 18.5 feet below that took passengers to the westbound Piccadilly Line platform. Although tube stations with platforms at different levels is not unique (such as Borough, Chancery Lane, Notting Hill Gate etc.), South Kensington was the only tube station having two lower lift landings.

In October 1977 a new lift at Tufnell Park was commissioned, supplied by Wadsworth, replacing the original No.1 lift. The new lift has a capacity for 50 persons and has centre opening doors and is slightly faster than normal, being at 250 feet per minute as against the usual of 180 or 220. A similar lift for No.2 position is due to be brought into service shortly.

A new automatic lift was installed in 1979 at Chalk Farm, in No.1 position and is able to be controlled from the landing or the car, with an alternative being able to work semi-automatically. A similar second lift is scheduled for service this summer, the former No.2 being taken out of use in July 1979.

In August 1979, No.2 lift was taken out of use at Hampstead, being the only one remaining in that double shaft, No.1 having been removed many years ago. This lift has been taken to the new LT Museum at Covent



Garden and is now on display, complete with sound effects! In this shaft, two new high-speed lifts are to be installed with the next year or so, and when completed, Nos. 5 and 6 of the Modernised Otis type will be taken out of use. This will then leave the lift service at Hampstead to four high-speed automatics.

Work started at the beginning of 1978 to replace two of the four lifts at Angel, which were over 50 years old, and one of which was out of service with major defects. Two new semi-automatic lifts are to be installed and will have audible warning signals sound before the doors close, which will be helpful to the large numbers of blind and partly-blind passengers that use Angel station.

Other current lift improvement schemes include Wapping, where a new lift is being installed in No.1 position. Two new lifts are also to be installed at Borough, replacing the 1906 vintage lifts at that station.

The following list is a summary of the LT stations which have lifts:

	Lift numbers in relation to shafts	Type	Speed in feet per Minute	Depth
Aldwych	1-2	Mod Otis	220	76.5
Angel *	3-4	Std Otis	220	97.0
Bank	1-2-3-4	Std Otis	220	71.0
Belsize Park	1-2/3-4	Std Otis	180	109.0
Borough *	1-2	Std Otis	180	53.0
Caledonian Road	1-2	Std Otis	180	78.0
Chalk Farm *	1	Otis Semi-Auto	200	30.5
Covent Garden	1-2	Mod Otis	220	113.0
Covent Garden	3	Std Otis	180	113.0
Earls Court *	3-4	Auto Otis	180	63.5
Edgware Road	1-2/3	Std Otis	180	72.5
Elephant & Castle (B)	1-2/3-4	Std Otis	180	68.0
Elephant & Castle (N)	5-6	Mod Otis	180	58.0
Gloucester Road	3-4	Std Otis	180	51.0
Goodge Street	3-4	Std Otis	180	85.0
Goodge Street	5-6-7	Auto Otis H-S	600	85.0
Hampstead *	3-4	Auto Otis H-S	800	181.0
Hampstead *	5-6	Mod Otis	265	181.0
Holland Park	1-2	Mod Otis	180	50.0
Holloway Road	2	Std Otis	180	35.0
Kennington	1-2	Std Otis	180	56.0
Lambeth North	1-2	Std Otis	180	49.0
Lancaster Gate	1-2	Mod Otis	180	41.0
Mornington Crescent	3-4	Std Otis	180	38.0
Queensway	1-2	Wads H-S	500	67.0
Regents Park	1-2	Std Otis	180	57.0
Russell Square	1-2-3	Std Otis	180	100.0
Tufnell Park *	1	Wads Semi-Auto	250	66.0
Wapping *	2	Std Otis	180	41.5

Note \* indicates work in hand in lift replacement or modernisation.

Mod Otis: Modernised Otis lifts

Std Otis: Standard Otis lifts

Otis Semi-Auto: Semi-automatic Otis

Auto Otis: Automatic Otis lifts (currently being modernised)

Auto Otis H-S: Automatic Otis High-speed lifts

Wads H-S: Wadsworth High-speed lifts

Wads Semi-Auto: Wadsworth Semi-automatic lifts.

Note that Bank station has four lifts in one shaft.



The lifts at Mornington Crescent and Aldwych both have ticket selling facilities in each lift, both being fairly quiet stations and not requiring normal booking offices. Mornington Crescent is open on Mondays to Fridays only, whilst Aldwych is open only during the peaks on Mondays to Fridays. Aldwych station is served only by the single line shuttle service from Holborn, and to advise the lift operator at Aldwych that a train is about to arrive at that station, the guard of the shuttle train pressed a plunger on the platform at Holborn, which rang the bell at Aldwych. As the journey time of the shuttle train is only 1½ minutes, it was arranged that the passengers would arrive on the platform at Aldwych whilst a train was waiting, and conversely, the passengers off the shuttle train would have a lift waiting for them.

With the re-signalling of the Holborn-Aldwych branch from 2nd March 1980, the plunger at Holborn has since been removed, and the bell at Aldwych is now rung as a train departs from Holborn, occupying a certain track circuit.

### Lift Replacement

As stated on page 209, the replacement of lifts by escalators started as early as 1914, but it was not until the 1920s and 1930s that the replacements made inroads into the withdrawal of lifts. However, in the interim period, new stations were equipped with escalators rather than lifts, from the start. The number of lifts at stations which still have them have been reduced, such as at Earls Court, Aldwych, Gloucester Road and Mornington Crescent. The direct replacement of lifts by escalators are listed below. It is believed that all the necessary stations are included, but the dates may not be complete. If anyone can add or enlarge on this list, the Editor would be pleased to receive details.

#### Northern Line

Clapham Common - 1.12.1924  
 Clapham North - 29.5.1926  
 Stockwell - 1.12.1924  
 Oval - 29.5.1926  
 London Bridge - 19.11.1967  
 Moorgate (C & SLR) - 3.7.1924  
 Old Street - 19.8.1924  
 Kings Cross - 18.6.1939  
 Euston - 15.10.1967  
 Strand - 1.5.1979 (taken out in June 1973)  
 Leicester Square - 27.4.1935  
 Tottenham Court Road - 1.2.1926  
 Warren Street - 27.9.1933  
 Camden Town - 7.10.1929  
 Kentish Town - 21.11.1932  
 Archway - 15.6.1931  
 Moorgate (GN & C) - 2.10.1936  
 Highbury (GN & C) - 7.4.1968

#### Piccadilly Line

South Kensington - 20.10.1973  
 Knightsbridge - 18.2.1934  
 Hyde Park Corner - 25.3.1932  
 Green Park - 18.9.1933  
 Piccadilly Circus - 10.12.1928  
 Leicester Square - 27.4.1935  
 Holborn - 19.5.1933  
 Kings Cross - 18.6.1939

#### Bakerloo Line

Waterloo - 17.3.1973  
 Trafalgar Square - 13.4.1926  
 Piccadilly Circus - 10.12.1928  
 Oxford Circus - 9.5.1914  
 Baker Street - 24.11.1940  
 Marylebone - 1.2.1943

#### Central Line

Shepherds Bush - 5.11.1924  
 Notting Hill Gate - 1.3.1959  
 Marble Arch - 15.8.1932  
 Bond Street - 8.6.1926  
 Oxford Circus - 5.7.1925  
 Tottenham Court Road - 29.9.1925  
 Chancery Lane - 25.6.1934  
 St.Pauls - 1.1.1939  
 Bank - 7.5.1924

#### Stations closed with lifts

King William Street - 25.2.1900  
 Euston (Eversholt Street) - 1914  
 City Road - 9.8.1922  
 South Kentish Town - 5.6.1924  
 Down Street - 22.5.1932  
 York Road - 19.9.1932  
 British Museum - 25.9.1933  
 Brompton Road - 30.7.1934



Finally, a note must be made of Finsbury Park station, which at one time had hydraulic lifts. As the platforms were only about 20 feet below ground level, this made them the smallest distance travelled by lifts on the Underground system. They were removed during Victoria Line construction work, but it is thought they were disused for at least 30 years before that. The spiral stairs between the BR platforms and the Piccadilly/Victoria lines shows the location of the shafts.

REGD. NO. 659,814

by H.L.Clarke

As is well known, the majority of signs installed at Underground stations in the 'twenties were of Johnston type, with full black lining-out of the roundel. The bar and circle device was displayed on a white background, the sign being made up from two enamelled sheets with the station name at the upper edge of the lower sheet. A few extra wide signs were constructed from a single sheet. As installed, the decorative wooden moulding round the station name was painted red, although blue is nowadays the preferred colour. An unusual feature, for station name signs, is the legend on many signs of this pattern which informs the traveller that the sign is to Registered Design No. 659,814.

This design was registered on 19th March 1917 by the London Electric Railway Company, described as 'Railway Proprietors', as a 'Sign for Use in Railway Stations'. The registration was extended for a further five years on 11th March 1922, and again on 8th March 1927.

Signs to this design were installed from 1923 (or earlier) until the early days of the L.P.T.B. During this period there were a number of variations in the display of the design number.

One pattern, manufactured by National Signs of Hendon, bore the maker's name at bottom left as shown in Fig.(i). Note the unusual abbreviation of the word 'Limited'. The design number is shown at bottom right as in Fig.(ii). These signs are to be found on the Northern Line at Kings Cross, London Bridge, Borough, Elephant & Castle and Oval. They were also to be seen on the ex-C & SLR platforms at Moorgate until removal in August 1975. All of these signs can be fairly confidently dated to 1924. Signs at Hendon Central (opened in 1923) are similar, but do not carry a maker's name.

Signs on which the dash in the design number is replaced by a comma, but otherwise identical to those described above, carrying no maker's name, are to be seen at Edgware and Burnt Oak (both opened in 1924). They are also the predominant type at St.James's Park, and can be seen at the eastern end of platform 3 at Mansion House Fig.(iii).

The other manufacturer whose name appears on this type of sign is Franco Signs, at two stations only, with a different arrangement in each case. On the City platforms at Kennington (1925) the maker's name is displayed at bottom left as in Fig.(iv), with the design number at bottom right as in Fig.(v). The remaining signs on platform 3 at Mansion House (apart from those described above) have the maker's name at bottom right as in Fig.(iv), while the design number at bottom left is as Fig.(v), but in larger lettering than found elsewhere.

Signs similar to those on the City platforms at Kennington, but bearing no maker's name, are to be found at Embankment (Northern Line southbound), Kennington (West End platforms) and Morden (all 1926), as well as at the eastern end of the inner rail platform at St.James's Park and at the western end of the eastbound platforms at Turnham Green. (These signs at Turnham Green are the last to retain a red wooden moulding, and I shall refer to them later). Similar signs, but with the design number at bottom left, are at West Brompton.



Another version has no comma in the number, which is at bottom right as in Fig.(vi). These signs are to be seen at Clapham South, Balham, Tooting Bec, Tooting Broadway, Colliers Wood and South Wimbledon, all of which can be dated to 1926.

The only other variant to be seen has the design number at bottom right as in Fig.(vii). This is to be found at Earl's Court (District), and Barons Court, and includes all the wide signs made up from a single sheet. Blackfriars also had these signs, but they were replaced when the station was rebuilt, recently.

There remain a number of signs of this design on which no design number is apparent. There are two probable causes for this. Firstly, in some cases it is very difficult to see the design number where the sign has settled in its wooden frame and where the bottom of the sign is obscured by half-a-century of dirt. Secondly, there is no reason why the design number should be carried on signs installed after the copyright expired in March 1932. This explains why this information is absent from signs at Hillingdon (Metropolitan Railway property until 1933), and it is probable that the signs of this pattern at North Ealing (which do not carry a design number) were installed for the extension of Piccadilly Line services to South Harrow on 4th July 1932, being used to replace the earlier solid-circle signs, as this was the only station concerned which it was not planned to rebuild. Other signs on which no design number is apparent are at Westminster, Temple, Fulham Broadway and at the eastern end of platforms 1 and 2 at Mansion House.

The two signs at Turnham Green are interesting for another than their original colouring. It has been shown that most other signs with type of lettering of the design number must have been installed in 1926, and yet these signs are on platforms not used by Underground trains until 4th July 1932, a date when it would be reasonable to assume that new signs would not exhibit the design number. Possibly they were originally on the other (now westbound) island platform and were moved later.

One final point may be of interest. Registered Design No. 659,814 was not only the design registered by the L.E.R. as a 'Sign for Use in Railway Stations'. It was one of twelve designs with this description, numbered 659,814 to 659,825 inclusive, all registered and extended on the same dates. Unfortunately, I have not been able to find out any further details.

DIAGRAMS - Note that the lettering is not accurate, their purpose is to show punctuation only.

Fig.(i)  
NATIONAL SIGNS L<sup>o</sup> HENDON. N.W.9.

Fig.(ii)  
REG<sup>o</sup> N<sup>o</sup> 659\_814

Fig.(iii)  
REG<sup>o</sup> N<sup>o</sup> 659,814

Fig (iv)  
FRANCO SIGNS. LONDON. W.1.

Fig.(v)  
REGD. N<sup>o</sup> 659814

Fig.(vi)  
REGD. N<sup>o</sup> 659814

Fig.(vii)  
REGD. N<sup>o</sup> 659.814.



## UNDERGROUND - Around the Country

by B.R.Hardy and F.W.Ivey

### Glasgow Subway, 16.4.80

As noted in UN221 (NF 146/80) the Underground reopened on 16th April 1980, 166 days after having been opened by H.M. The Queen on Thursday 1st November 1979. To start with, services are operating only between about 0600 and 1900 on Mondays to Saturdays, although on leaflets being distributed, the closing time was given as 1930. It was planned to operate four trains on each circle, but in the event, on the opening day there were six per circle (numbered 1-6 outer rail and 11-16 inner rail), although train 11 was not running in the evening peak. With modern ATO rolling stock, modern stations and signalling, the whole image was spoilt by ugly 'home-made' train set number boards. All fifteen stations were open. For the first time, the new station at Partick was used in its own right, as an interchange between the Underground and BR, being first opened on 17.12.79 for BR passengers only.

### Glasgow (BR), 16.4.80

A large article on BRs underground lines in Glasgow appeared in UN217 (pages 6-9), to which readers are referred for details. First impressions were that almost all of the older rolling stock (classes 303 and 311) had been repainted in blue and grey and that only a very small number of units were in service in the old all-blue livery. Most of the new livery units had the class number as well as the unit number on the driving ends.

Between 12.4.80 and 20.4.80 on the route via Queen Street, engineering work in the tunnels near Charing Cross station took place. Thus there were no trains between Queen Street and Partick (see map on page 7 of UN 217). East of Queen Street, a 15 minute service to and from Airdrie was provided, reversing in the westbound platform at Queen Street. There were no electric trains to and from Springburn, but the diesel service between Springburn and Cumbernauld was extended from the former to Bellgrove to connect with the special Airdrie/Queen Street service. Additional peak trains to and from Cumbernauld ran direct to Queen Street (high level) station. An almost normal service was provided on the Argyle Line east of Partick to Motherwell/Hamilton/Lanark. West of Partick, most of those services, which normally terminate at Dalmuir or Dumbar-ton, were extended to Balloch and Helensburgh, in the absence of Queen Street trains. Thus, the number of trains through Partick was substantially reduced during this week, from 15 trains per hour (8 via Queen Street, 7 via Central low level) to 8, all via Central low level only.

### Liverpool BR, 23.4.80

Following previous notes (UN217, page 9), little has changed on the Wirral Line, except that James Street is now closed after about 1900 on Mondays to Saturdays and all day on Sundays (operative from 1st October 1979) as most passenger traffic apparently now uses Moorfields station. Services on the new timetable operative from 12th May 1980, are almost identical to the previous timetables.

On the Northern Line (Garston/Liverpool-Southport/Ormskirk/Kirkby), following the guards' dispute with inadequate heaters on the class 502 stock (which was settled shortly after) some of this stock is now in service again, although normally confined to the Garston-Kirkby line. Other workings appear to be on peak hour Southport services, although none were seen on 23.4.80. Thus, all Southport and Ormskirk trains were formed of class 507 stock, with several six-car trains in the peak. A reformation of units was noted, where 507010 has received motor car M64372 from 507006 - a substitute unit number ('10') being seen



riveted on the car end as 5070'10'. The other motor cars are accident damaged and are being repaired at Horwich.

The four trains on the Garston-Kirkby service comprised 1 x 3 and 1 x 6 of class 503 stock (on loan from the Wirral Line) and 1 x 3 and 1 x 6 of class 502 stock. Three further units of class 507 stock are due for delivery by the summer. It is possible that their arrival and entry into service might see the end of the class 502 stock altogether.

The new timetable from 12th May 1980 sees a number of alterations to the existing pattern of train services. On Mondays to Fridays on the Southport line, all northbound shorts to Hall Road are discontinued, with all trains going through to Southport. This now gives 15 departures between 1601 and 1801 inclusive from Liverpool instead of 16 in the same period, two of which were to Hall Road only. In the morning peak, in the opposite direction, the same number of trains are run, in the same timings from Southport and Crosby (the latter being shorts from Hall Road, empty to Crosby), but there is now only one fast train instead of three, the other two being made all stations.

On Sundays, the operating pattern has been substantially altered as follows: The service from Garston now operates to and from Southport (instead of Kirkby), giving the longest ever continuous ride on the system of  $24\frac{1}{2}$  miles, every 30 minutes. Between 1100 and 2100 on summer Sundays, an additional 30-minute service to and from Southport is provided from Liverpool, giving a combined 15-minute service interval. The Ormskirk service has been reduced to hourly throughout the year (previously every 30 minutes summer Sundays and every 45 minutes on winter Sundays), while the Kirkby (pronounced 'Kerby' !!) service continues to be every 30 minutes, but from Liverpool Central only.

#### POINTS OF INTEREST

Probably the first train to run on the Victoria Line was formed of Pre-1938 tube stock! Twin experimental tube tunnel was constructed from Finsbury Park to Netherton Road, which started in January 1960, its purpose to try out various tunnelling methods. The southbound tunnel was connected to the southbound Northern City Line at Finsbury Park. It was made available from 13.5.62 and current for the experimental section was from the southbound line via a circuit breaker. The first test run took place on Wednesday night/Thursday 13th/14th June 1962, with two driving motor cars of Pre-1938 tube stock and for the following two nights. As trains were booked to stable in the platforms at Finsbury Park, those in the southbound platform were coupled up (three two-car units) and stabled in the northbound platform at Highbury overnight. The complete train then returned to Finsbury Park the following mornings, uncoupling there to form three two-car trains.

When the first stage of the Central Line extensions opened as far as Stratford on 4.12.46, 'double' positive current rails were laid for a distance between Bethnal Green and Mile End, in the vicinity of Queen Mary's College, so as to prevent interference with the electrical equipment, which might be possible from dangling positive shoes. This arrangement still holds good today. The positive current rails on both sides runs for a distance of 1,740 feet on the westbound line and 1,800 feet on the eastbound line and starts about 690 feet west of Mile End station.

Between Stepney Green and Mile End on the District Line, the railway passes under the Regents canal. At this point separate tunnels are provided for each track instead of the usual brick arch, as a protection against seepage. These tunnels are 140 feet long and are lined with iron segments of 18 feet internal diameter. They were completed in 1901



in readiness for the opening of the railway from Whitechapel to Bow on June 2nd 1902.

The following are notes and observations from the past, kindly supplied by Nigel Hyde:

#### Earlier regular use of some crossovers

For many years after the war on the last 'normal' Monday to Friday train service before a holiday; e.g. Maundy Thursday, Fridays before a Bank Holiday etc., the 8-coach 'T' stock train that stabled after the morning peak in the platform at Aldgate worked to Edgware Road No.3 platform, returning direct from that platform in the afternoon. This was to allow District Line trains from Putney Bridge to be extended from Edgware Road to Aldgate. The 'T8' train had to work empty westbound to Edgware Road. Returning in the afternoon, it worked empty to Great Portland Street, as the Circle Line platform at Baker Street only take 6-car trains. The practice of extending Putney Bridge trains to Aldgate on such occasions, ceased after Easter in 1964. Also, an early morning 'O' stock train from Hammersmith to Baker Street was booked to work via platform 3 at Edgware Road at one time.

On Sundays, certainly until the early 1960s, part of the main District Line service reversed east to west at the then Charing Cross, whilst when two platforms existed at Gloucester Road, early or late Circle Line trains did reverse from Inner Rail to Outer Rail instead of at South Kensington.

#### Tube Stock at Harrow-on-the-Hill, platform 2

Until 1954 it was possible, and indeed I saw it happen, for a Bakerloo Line train, or other train for that matter, en route from Neasden depot to Acton Works, to cross to the northbound fast line just north of Wembley Park, cross to the northbound main line at Harrow South Junction and continue to the 'high level' connection at Harrow North Junction before diverting on to the Uxbridge Line at West Harrow. The regular use of this route was by some of the peak hour fast trains which ran non-stop to Eastcote (later Rayners Lane) and by Uxbridge line goods trains. Before the layout at Harrow was revised in 1948 just for operating convenience to avoid delays, trains for Uxbridge from the then numbered platform 3 would cross to the northbound main line just before Bessborough Road bridge and use the 'high level' route to West Harrow. Southbound trains from the Aylesbury and Watford lines all ran via the local road to Wembley Park except for a few peak hour trains which did use the fast line - but this line crossed over both local roads north of Preston Road by the sports ground and a small 'signal box' (in fact not much larger than a garden shed) controlled the signals at Preston Road when the southbound fast line was being used. This cabin was 'MZ' and closed in 1948.

#### Experimental Metropolitan Line cars

Being built on withdrawn 'T' stock underframes, No.17000 was perhaps destined to be unsatisfactory from the start, the other car, No.20000 being more luxurious. As I recall it there was a total seating of 60 in three saloons served on each side with a pair of doors, which with the side corridor meant only 8 window seats in the whole car. Open and close push buttons for passenger use were provided for the doors. As No.17001 this car was very much the prototype for the current 'A' stock. Car 20000 was the 'de luxe' model and was much preferred by the discerning passenger! The use of these cars on the Watford line was limited as they were in an 8-coach train formation and these sets were only used during the peak periods. The Monday to Friday morning trip in fact worked to and from Rickmansworth, and as there was a layover of 35 minutes, the train was booked to 'Shunt to Refuge' - the present



No.23 siding alongside the northbound line which in those days was only electrified for a very short distance.

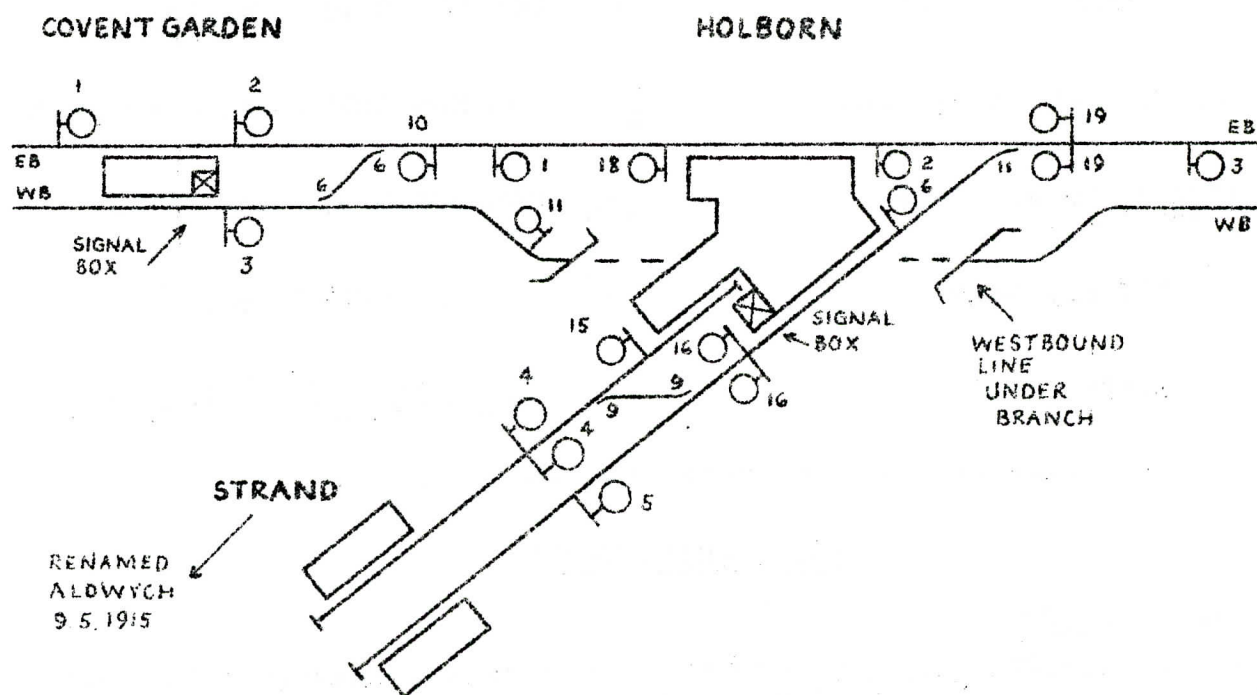
Traction control equipment for the 'A' stock was tested on a 6-car train of 'R' stock on the Watford line. This train made empty test runs for a period of nearly a year with 'PCU' equipment on the 2-car unit covering the two motors on the DM and the two motors on the NDM.

### The Chesham Shuttle

The Metropolitan Line operated a 3-coach train of 'T' stock on the Chesham branch from September 1960 until it was replaced by 'A' stock. The 'T' stock train concerned was formed M-T-M (not M-T-CT as one might expect) and did not have the control line connected so that only the leading DM was powered. As far as it is known, this was not the case when two DM cars of Pre-1938 tube stock worked on the Aldwych service.

### THE ALDWYCH CONNECTION

The connection to the Aldwych branch has been featured in Underground News recently, in respect of recent developments. However, what has recently come to light is details of the arrangements when the branch line was opened on 30.11.1907. Basically, to get onto the branch, the method used is as now, in that trains have to shunt east of Holborn station and then reverse back onto the branch. It was getting from the branch back to depot (then at Lillie Bridge) that was of interest, as the diagram below illustrates. The train, having shunted onto the eastbound line travelled back wrong line to Covent Garden obeying signals installed for this purpose. The signals and points at both Holborn and Covent Garden signal boxes were interlocked to prevent conflicting moves being set up.





QUESTION AND ANSWER

QA34) When did the Northern Line last use headcodes, and what were the display arrangements?

A) It is thought that there is no official answer to this question. All of the early Ian Allan ABC Underground books show the Northern Line as having all lights for all destinations, thus:  $\begin{matrix} 0\ 0 \\ 0\ 0 \\ 0\ 0 \end{matrix}$

However, an instruction was issued to be effective from 20th May 1951, that oil lamps on the rear of Northern Line trains were to be abolished from that date, and at the same time, a new set of headcodes was issued. Having spoken to various people that worked on the Northern Line at the time, the practice of displaying all five lights either continued, or started from then. For the record, the codes are listed below:

$\begin{matrix} 0\ 0 \\ 0\ 0 \end{matrix}$ HIGH BARNET ) MORDEN ) via Bank	$\begin{matrix} 0\ 0 \\ 0\ 0 \end{matrix}$ HIGH BARNET ) MORDEN ) via Charing X
$\begin{matrix} 0\ 0 \\ 0\ 0 \end{matrix}$ MILL HILL EAST ) TOOTING BDY ) via Bank	$\begin{matrix} 0\ 0 \\ 0\ 0 \end{matrix}$ MILL HILL EAST ) via TOOTING BDY ) Charing X
$\begin{matrix} 0\ 0 \\ 0\ 0 \end{matrix}$ FINCHLEY CENTRAL via Bank	$\begin{matrix} 0\ 0 \\ 0\ 0 \end{matrix}$ FINCHLEY CENTRAL via Charing X
$\begin{matrix} 0\ 0 \\ 0\ 0 \end{matrix}$ EAST FINCHLEY via Bank	$\begin{matrix} 0\ 0 \\ 0\ 0 \end{matrix}$ EAST FINCHLEY via Charing X
$\begin{matrix} 0\ 0 \\ 0\ 0 \end{matrix}$ ARCHWAY via Bank	$\begin{matrix} 0\ 0 \\ 0\ 0 \end{matrix}$ ARCHWAY via Charing X
$\begin{matrix} 0\ 0 \\ 0\ 0 \end{matrix}$ EDGWARE ) KENNINGTON ) via Bank	$\begin{matrix} 0\ 0 \\ 0\ 0 \end{matrix}$ EDGWARE ) KENNINGTON ) via Charing X
$\begin{matrix} 0\ 0 \\ 0\ 0 \end{matrix}$ COLINDALE via Bank	$\begin{matrix} 0\ 0 \\ 0\ 0 \end{matrix}$ COLINDALE via Charing X
$\begin{matrix} 0\ 0 \\ 0\ 0 \end{matrix}$ GOLDERS GREEN via Bank	$\begin{matrix} 0\ 0 \\ 0\ 0 \end{matrix}$ GOLDERS GREEN via Charing X
$\begin{matrix} 0\ 0 \\ 0\ 0 \end{matrix}$ HAMPSTEAD via Bank	$\begin{matrix} 0\ 0 \\ 0\ 0 \end{matrix}$ HAMPSTEAD via Charing X
$\begin{matrix} 0\ 0 \\ 0\ 0 \end{matrix}$ EUSTON via Bank (NB)	$\begin{matrix} 0\ 0 \\ 0\ 0 \end{matrix}$ GOLDERS GREEN (SB)
$\begin{matrix} 0\ 0 \\ 0\ 0 \end{matrix}$ HIGHGATE DEPOT	$\begin{matrix} 0\ 0 \\ 0\ 0 \end{matrix}$ MILL HILL EAST & FINCHLEY CENTRAL (Shuttle)

Any other destinations not covered, one white light.

ENGINEERING WORKS

Edgware, 13.4.80

On Sunday 13.4.80, the Northern Line service was suspended between Colindale and Edgware until about 1015, so that the scissors crossover at Edgware (Nos. 21 and 22 points) could be retimbered. Most northbound trains therefore reversed north to south at Colindale. Between Colindale and Edgware a replacement road service was provided. On this day, no trains were scheduled to start or stable at Edgware depot, Golders Green providing the three trains that normally start at Edgware.



Alperton, 19/20.4.80

The new bridge D17 at Alperton was rolled in position over the weekend of 19th/20th April 1980, the old girder type having been removed. So that this could be done, no Piccadilly Line trains operated between Acton Town and Rayners Lane on both days. This meant that trains which normally work to and from Rayners Lane, reversed west to east at Acton Town, via the west siding. Substitute road services were provided between Acton Town and Rayners Lane, in the form of coaches by Fox of Hayes on Saturday 19th April, and LT buses on Sunday 20th April.

LETTERS TO THE EDITOR

Sir,

I'd like to make a few comments on UN219. Mr. Creswell need not have apologised for his article on Christmas Day services since these are such a radical departure from normal. This holds true for the entire holiday period and the detailing of the timetable changes is part of the overall enthusiast fascination with the Underground. London's practices, however, are quite different from those of American rapid transit railways. Basically, all U.S. transit systems, bus and rail alike, operate three basic schedules: Daily, Saturday and Sunday and Holiday. Thus, Sunday and Holiday schedules are operated on both Christmas and New Years Days (we have no Boxing Day here) although I suspect there are some adjustments in cities such as New York and Chicago where the evening peaks start somewhat earlier than normal on both Christmas and New Years Eves. However, December 24th is traditionally a last-minute shopping day and the shops are usually very crowded until 1800 closing. Some systems operate additional runs on New Years Day if football games or other large-capacity athletic events are taking place. The days between Christmas and New Years are normal work days and often heavier-than-normal shopping days (Christmas returns and after-Christmas sales) so that normal schedules are operated. Finally, to quote from the New York City Subway Map: 'The Subway operates 24 hours a day. All stations are served at all times, but not all routes operate at all times'.

I would also like to comment on a feature of the D stock which was described in the D Stock Supplement, page 45. Under the heading of 'Couplings', paragraph 2 discusses the lack of spring buffers and a new feature, the ridged buffer blocks, not seen since the District B stock of 1905. In America, this feature is called an anti-climber and has been installed on every rapid transit car built since early in this century. New York City 'El' cars of late 19th Century did not have anti-climber, but after a couple of relatively minor accidents which caused more injury and damage than they should have, they were installed and quickly proved their value. In most cases, the anti-climbers run the full width of the car and, in fact, the standard description in listing the dimensions of a car is 'length over anti-climbers'.

Yours sincerely,

J. Wolinsky,

Los Angeles,  
U.S.A.

Sir,

The Metropolitan and Jubilee lines appear to be having their problems of late in the way of signal failures. In just over a week I, as a commuter, have been caught in the middle of two such failures that have occurred in the evening rush hour. I say as a commuter for this is precisely what I was - on my way home - and it is as a commuter that I am writing this letter.



The first incident occurred on Monday 21st April 1980. The first inkling I had that all was not well was a blackboard announcement at Green Park station concourse stating that due to a signal failure at Wembley Park, delays were occurring on the Jubilee Line. On the northbound Jubilee platform there was a crowd, rather larger than usual for this time of the day, but I did manage to get to my usual boarding to wait for the next train.

Very soon a Public Address announcement was made stating that a train was coming and London Transport apologised for the delay to the service, but this was due to a signal failure at Wembley Park. However, the train came in and I managed to get on and the usual progress was made to Baker Street where I alighted - so really, so far, I personally suffered no delay.

At Baker Street I went up to the Metropolitan Line platforms and just got to my usual position here for boarding an Uxbridge train, when the 1741 from Baker Street (all stations to Uxbridge) arrived in platform 2 from the City. I boarded this and managed to get a seat without any difficulty. The train pulled out of the station right on time. Up to this time, the only announcements made were the usual ones directing passengers to the correct platforms for trains.

The first stop occurred just before coming into the open to go over Regents Canal. This was for about 2 minutes before the train tripped past this. A similar procedure was adopted past the next signal (by Lords closed station). The train then proceeded with stops and starts right up to arrival at Finchley Road, the stops now being much longer; i.e. about five minutes each. The train arrived in Finchley Road at about 1820 and waited at this station for over five minutes before departing. It was at Finchley Road that a Public Address announcement told us that both Jubilee and Metropolitan lines were affected by this signal failure.

From Finchley Road, the train progressed with many stops, each lasting about five minutes until arrival at Neasden at 1919 where the train stopped in platform 1. At this point the guard did ask the driver whether the doors should be opened, but the driver rapidly replied with a loud and emphatic 'NO!' which was heard by most of the passengers in the rear car and was much to their amusement. By this time some passengers were beginning to get hungry because I noticed one or two packets being opened and a slice of bread produced from each of these - no doubt what was supposed to be that evening's loaf at home. I wonder if the journey had been any longer, whether anybody would have produced a meal!

After about three minutes wait at Neasden the train pulled out and progressed with stops as before to arrive opposite Neasden North signal cabin at 1928. The train then tripped past the next two signals in fairly quick succession. Once in Wembley Park, arriving at 1933, the rest of the journey progressed as usual without any further delay. I arrived at West Harrow at 1953 and home 10 minutes later, or two hours later (according to which trip you count it!) than I normally do when travelling home by that particular train.

As a sequel to this, the station blackboards at Green Park station had written on them an apology from London Transport for the delays the previous evening and that this was due to an incident at Finchley Road. Was there something else that happened or was it all connected?

(It appears that the apology was not complete, as the incident referred to was at Wembley Park, but that at Finchley Road was the following morning - another signal/point failure - Ed.)

The second delay was during the evening peak on Tuesday 29th April. On this occasion I had just got to my usual place on No.2 platform at Baker Street when the fast Uxbridge (the 1750 from Baker Street ex-City



pulled in. As I boarded an announcement was made over the Public Address that due to a signal failure at Neasden, there may be some delays! However, the train left Baker Street right on time at 1750, but the first stop occurred as soon as the rear car (in which I was seated) was clear of the platform. Progress to Finchley Road was about the same as the previous week and arrival was at 1827 or 37 minutes after departure from Baker Street.

As soon as the train stopped at Finchley Road, a Public Address announcement told passengers that due to signal failure at Neasden it would be quicker to travel to Wembley Park by the Jubilee Line and catch connections at Wembley Park which were being arranged. At this time this sounded a suggestion but a minute later an announcement said that the train was terminating at Finchley Road and that the Jubilee Line was the only means of getting to Wembley Park at that time.

The Jubilee Line train in platform 2 at that time was too full to get on, so that one I missed. The next one, which followed immediately, stopped so that a door was right in front of me. Passengers who wanted to get off did so, even those who wanted the Metropolitan Line, for an announcement was not made about the Neasden failure until after those of us in the know had boarded. However, luck was not on our side for as soon as that announcement had been made, the train crew announced over the train Public Address system that the train was terminating at this station and all passengers were to disembark. Imagine the confusion - some trying to get on; some trying to get off; and some refusing to budge either way! To further help the chaos twice more, the station and train announcements contradicted each other. To back up the station announcements, the train indicator and the destination blind at the front of the train said 'Stanmore' but the train crew, to help their side of the argument, switched off the train lights. So you might say there was stalemate!

Meanwhile, my Uxbridge train was changed to a 'Special' and drew out empty. The next two Metropolitan Line trains (a slow and fast Watford) did the same thing - changing to Specials, disembarking the passengers and then pulling out empty. These movements were done between Jubilee Line trains and I wondered whether they were being diverted to the Jubilee Line tracks to get out of the way to let others between Baker Street and Finchley Road come into the latter station and disembark the passengers. Both No.1 and No.2 platforms were pretty crowded by this time!

On the Jubilee Line the chaos was eventually sorted out, the passengers on the terminating train persuaded to alight, and it then pulled away empty. I saw it later in Willesden Green reversing siding and not at West Hampstead as I had expected. The next train quickly followed but overshot where I was standing. By the time I got to the nearest door the car was full. As it happened, the driver did me a good turn, as a station Public Address announcement said that the fault at Neasden had been rectified and the next Metropolitan Line train would proceed as it should. As this was an Uxbridge train, I was determined to get on and this I managed to do. Departure from Finchley Road was at 1840 and the journey thereon was uneventful.

This time I arrived home at 1910 - some 40 minutes later than usual. Not such a protracted journey as that caused by the previous delay but I feel that possibly it was a more eventful one and the part enacted at Finchley Road certainly added colour to the incident, which helped to make the time pass that much quicker!

Yours sincerely,  
Louis A. Bartrip.

Harrow, Middlesex.  
1st May 1980.



## BOOK REVIEW

LONDON TRANSPORT 1979 - LT Annual Report, A4 size, 40 pages, glossy colour card cover, price £1.00

Published on 1st May 1980, the 1979 LT Annual Report continues in style to those produced in previous years. It is basically divided into six sections: London Buses, The Underground, Service Results and Marketing, Ancillary Businesses, Administration, and Financial Results. This edition continues to be lavishly illustrated with colour diagrams and photographs. It is interesting to note in the statistics of the number of staff employed at the end of 1979, which was 60,449. This has been a fairly constant figure since 1975 - 60,230, 60,230, 59,676, 59,998 and 60,449 respectively.

Summarising 1979, it is stated that year has been one of frustration, starting with an exceptionally bad winter, and with many buses not being available. During the year, however, the situation had improved, which was helped by the introduction of the eight new bus districts from October. The Underground carried more passengers in 1979 (at 59½ million) - highest since 1975. This figure is an increase of 25 million on the 1978 figure. The main event was, of course, the opening of the Jubilee Line by H.R.H. Prince Charles on 30th April.

### FROM THE PAPERS, MAGAZINES, TELEVISION, ETC.

#### Evening Standard

25.4.80 Under the heading of 'Can no-one rescue the untouchables?' this describes the current sad story of those who clean the Paris Metro - having been on strike for five weeks. Some 900 staff are employed to keep the Metro clean, comprising entirely of immigrants. However, they are paid well below what they should be, the Metro authorities disclaiming any responsibility for them, with the argument that the labour force is hired from sub-contractors. The cleaning staff are so 'separate' from the Metro staff, and they are barred from using Metro staff canteens and washrooms. The story to date is one of a dirty Metro, with passages and platforms covered with litter and rubbish.

Girl About Town - A recent issue describes the work of the Tube Theatre which comprises journalist and actor Ken Ellis with assistants, who travel on the Underground about twice a week performing comedy situations, on the Piccadilly Line. It is said that London Transport turn a blind eye to the Tube Theatre, with the entertainment provided being to cheer up the travelling public.

'An Evening With the Mad Commuter' was described fully in Underground News No.184, pages 318/9.

#### BBC 1 Television

27.4.80 On Sunday 27th April, the BBC TV programme 'Good for Business' shown at 2305, told the successful story of Metro-Cammell, the Birmingham company that builds Underground rolling stock. It was stated that the company currently have orders until 1983 only, with the last seven years or so being exceptionally good for orders. However, it has been the case of adapt or perish, the former being adopted by the company.

Metro-Cammell have been in business since 1835 and the birth of the firm was described. It originated as a coach building firm established in 1835 by Joseph Wright. With several merges with other firms, and changes of name, it became what is now Metro-Cammell Ltd. In recent years it was agreed that only Metro-Cammell would build rapid transit stock, with BR building carriages, wagons and locomotives.



Recent orders for rapid transit vehicles (other than from London Transport) have included 88 articulated 2-car units for the Tyne and Wear Metro, for which Metro-Cammell had to compete with German tram-car manufacturers, and two separate large orders for cars for the Hong Kong Underground. With the first order placed, the system of current collection had to be changed from 3rd rail to overhead at the last minute, and Metro-Cammell had to decide whether to drop out or to continue with the order - the latter was decided upon. Despite problems of the alterations, such as redesigning the car roof where the pantograph would have to be fitted, the overall cost of the vehicles did not increase. As the Hong Kong stock was to serve the most crowded island on earth - to move millions, and as the climate was hot, the large cars had air conditioning incorporated. Delivery of the current order is expected to be completed in the autumn of 1980.

With the Tyne and Wear contract finishing this year, and the London Transport D stock contract finishing in 1982, Metro-Cammell are currently exploring ways of finding further work and winning more orders. One such avenue being investigated is that in Detroit, USA.

The programme was very interesting and well presented. The LT enthusiast was well catered for, with many sequences of D stock - at Metro-Cammell (some cars being seen on the ex-1938 tube stock bogies - NF150/80) and on LT - in Ealing Common depot and on the South Harrow branch.

#### MODELLING

This year's Model Railway Club Exhibition at the Central Hall, Westminster at Easter, was much the same as last year's. The layout of the stands was identical and most of the models on display were of the same high quality.

The London Transport models on display were:

1. Gauge 1 Metropolitan Electric Locomotive, from the Gauge One Association.
2. K Class tank engine from Mr. A. Cruickshank, which was in intermittent use on the 'Thame' layout along with various Metropolitan goods wagons.

Also, K's displayed their kit for an 'A' class tank engine, which is at last freely available from the Society Sales Stand. It is hoped that this kit will give London Transport modelling the impetus it deserves.

CASC. 2.5.80.

#### UNITED STATES UNDERGROUND RAILWAYS

by Julian Wolinsky  
and Bob Bisio

New York A strike by New York City subway staff ended after eleven days with the signing of a two-year contract calling for a 9% rise the first year, 8% the second and a cost-of-living rise in the last six months of the second year not to exceed 6%. However, the subway wasn't idle during the walkout. Supervisory personnel operated 'firewatch trains' to keep tracks free of rust. Thirteen trains covered every inch of every line three times a day, checking station platforms which were manned by supervisors.

The end of the strike also brought bad news from the Department of Transportation in Washington. A preliminary report prepared by the Urban Mass Transit Administration has called the R-46 car a potential safety hazard and ordered a diligent course of action to correct the



situation. The Transit Authority immediately announced a 47% cut in useage of the car. The R-46 is the newest stock but it has been plagued by difficulties from the beginning. The order was completed three years behind schedule by Pullman-Standard and almost immediately cracks in the bogie frames were reported. So far, more than 1,700 cracks have been discovered on 814 bogies, forcing hundreds of cars out of service for repairs at any one time. As an interim measure old cars which had been removed from service due to excessive maintenance costs have been overhauled and returned to service while a plan to completely replace every R-46 bogie was proposed, accepted and is now in the design phase. The R-46 makes up 11.6% of the total subway stock. The Transit Authority insists that services will not be cut by the reduction of R-46 trips, since most of the cutbacks will be made during the off peak, when older cars will be substituted. In addition to the bogie problems, at least 20 other defects have been found and indications are that it will be a long time until the entire R-46 fleet is returned to unrestricted service. Meanwhile, legal action is proceeding, including a lawsuit against the manufacturer by the city and a grand jury investigation into possible bribery of a Transit Authority inspector by Pullman and/or its employees.

It is reported that on Tuesday 19.2.80, that three separate incidents occurred where the victims of muggers/attackers fought their attackers back. A robber was chased and caught by 40 passengers and a conductor and detained him until the police arrived. The second incident involved a boxer, who gave a direct hit to a youth that was pestering a female passenger. The third incident saw two youths caught by police assisted by a passenger, upon who, robbery was attempted and was pushed onto the track.

San Francisco - BART The Bay Area Rapid Transit has approved a \$450,000 contract with Kaiser Engineers to develop requirements and design guidelines for a new car. It is hoped the study will allow BART to advertise for bids in November 1981. The 71 mile system originally obtained 450 cars from the Rohr Corporation, an aerospace firm which briefly tried its corporate hand in the transit business. Several of the original order have been destroyed by fire or accident and BART are still having maintenance problems with the rest, causing an abnormally large number to be out of service. The size and complexity of the BART cars make their cost much higher than that of more standard stock.

On Tuesday 18.3.80 approval was given for a \$4.2 million plan to replace the highly inflamable seat cushions in BART rapid transit rolling stock. It is expected that the new seats will be installed within six months, starting in mid-May. The new seat cushions will be made of low-smoke neoprene covered with a blend of 90% wool and 10% nylon.

A feasibility study has been carried out by the Department of Transportation on an extension to the system to San Francisco International Airport. The cost of the project would be \$650-700 million at present day prices.

San Francisco - Muni Metro A new \$330 million Muni Metro opened in San Francisco on 18.2.80. Called the N-Judah line, the new system uses cars that can run on the street or in the subway. It has taken 13 years to build. On Friday 28.3.80 however, one of the cars broke down in the tunnel in the evening rush hour and passengers detrained themselves and walked  $\frac{1}{2}$  mile to the Cole Street tunnel exit.

#### SOCIETY SECTION

##### Press Dates:

For UN223 (July) - by Saturday 7th June 1980.  
For UN224 (August) - by Saturday 5th July 1980.



## Posting of Underground News

UN220 was posted on 23rd March 1980.

UN221 and the Museum Supplement were posted on 29th and 30th April 1980.

## An Apology - Blood, Sweat and Tears

Whilst posting UN221 and the Museum Supplement during the evening of 29th April, your Editor managed to cut his finger, resulting in many envelopes having blood stains. This should not, of course, affect the journal inside. (The offending finger has since been returned to service after the services of a car examiner had been obtained!) The publications team do not normally resort to drawing blood whilst preparing Underground News for you - the sweat and tears are enough!

## Society Officers Jobs and Addresses

The last complete list of Society Officers, their jobs and addresses was published in Underground News 217, page 23. The following are alterations and amendments to that list:

The Committee of the Society now comprises Messrs. P.R.Connor (Chairman), D.F.Croome (Vice-Chairman), P.R.Creswell, G.A.Finch, B.R.Hardy, R.J.Greenaway, F.W.Ivey, N.H.G.Mitchell and B.R.Panting.

Mr.B.R.Hardy is now (temporarily) Photographic Curator.

The position of Poster Curator is now vacant.

## Society Rules - Amendments

Members are asked to amend their copy of the Society Rules with the following, which was agreed at the Annual General Meeting:

Add at the end of Rule 5(e) - 'and that the nominator is a paid-up member'.

## Rover Record Smashed

Further to the note on page 138 of UN220, the 20th Enfield Scouts had a second attempt at beating the record for visiting all 278 stations served by LT trains on Tuesday 25th March 1980. This time, there were four in the party: Robert Robinson, Finn Gleeson, David Herring and Paul Eddington.

Starting from Ongar on the first train at 0547, the group suffered an early setback when they found Shoreditch station (scheduled to open at 0706) was in fact still closed at 0726, due to the late arrival of station staff. However, they were able to visit it ten minutes later, by which time it was open.

From that time onwards fortune favoured the attempters, and by making several lucky connections they were able to pick up time, so that by the early evening they were 45 minutes ahead of schedule. They finished at Upminster at 0009, taking 18 hours 22 minutes to cover the whole system, and beating the previous record by 1 hour 3 minutes.

This excellent time was helped by careful planning, hard running to connect between trains, and a willingness to make adjustments to their plan at a moment's notice, so as to take the best advantage of connections. Our congratulations go to the successful group, and our thanks to those LURS members who assisted in the work of monitoring the attempt.

NHGM.

## Society Sales

The K's Metropolitan 'A' class 4-4-OT kit is now available from the Assistant Sales Manager at 21 Chestnut Grove, South Ealing, London, W5 4JT. The prices are on the following page.



The r.r.p of the 'A' class kit is £14.88, but is available to LURS members at £13.50 post free.

A motorising kit is also available, r.r.p £4.32, available to LURS members at £3.75 post free.

### ROLLING STOCK ALTERATIONS

April, 1980

#### CO/CP Stock

From Ealing Common to Ruislip (Condemned)

53018-54018 1st  
53209-013096-54209 21st  
53017-013067-54017 22nd  
53222-54208+53054-54254 25th

#### CO/CP and R Stock

Ruislip to Kings, Newmarket, for scrap

53016 53228 54016 54054 54252 013073 013086 23511 22616 16th

#### D Stock

From Metro-Cammell, Birmingham, delivered to Ruislip

7012-17012-8012+8013-17013-7013+7522-17522-7523 18th  
7014-17014-8014+8015-17015-7015 25th

Ruislip to Ealing Common

7010-17010-8010 1st  
7522-17522-7523 21st  
8013-17013-7013 23rd

Entered Service, District Line

7008-17008-8008+8009-17009-7009 21st  
7002-17002-8002+8003-17003-7003 22nd  
7000-17000-8000+8001-17001-7001 24th  
7006-17006-8006+8007-17007-7007 28th

#### Miscellaneous Movements

PC855 Acton to Ealing Common (ex. collision and overhaul) 3rd  
L130+1051+L131 Acton to Golders Green (ex. derailment) 3rd  
L152+~~3906~~-3907+L153 Acton to White City 13th  
3902-~~4929~~-3903 Acton to Hainault for test work 17th  
3433-4533-~~3533~~ Acton to Neasden (ex. collision) 21st  
L130+~~10165~~-~~11165~~+L131 Neasden to Acton for PC conversion 24th

#### Sleet Locomotive Movements

ESL10 $\frac{1}{2}$  Highgate to Golders Green 8th

#### Units to Acton for Overhaul

Northern 1228-2228-9229-1229 2nd  
Metropolitan 5046-6046-6047-5047 3rd  
Central 1510-2510-9511-1511 11th  
Metropolitan 5530-6530 17th  
Northern 3409-4509-3509 23rd  
Northern 1190-2190-1191 24th  
Central 1570-2570-9571-1571 24th  
Central 1476-2476-9477-1477 30th

#### Units from Acton after Overhaul

Bakerloo 10151-012309-11151 1st  
Northern 1208-2208-9209-1209 2nd  
Metropolitan 5052-6052-6053-5053 3rd



Units from Acton after Overhaul (Continued)

Central	1530-2530-9531-1531	11th
District	21147-23320-23413	16th
Metropolitan	5529-6529	17th
Northern	3406-4506-3506	23rd
Northern	1282-2282-1283	24th
Central	1500-2528-9501-1501	24th
Central	1502-2502-9503-1503	30th

Reformations

From	To	
1192-2192-9193-1193	1192-2192-9193-1051	1193 derailment damage
1500-2500-9501-1501	1500-2528-9501-1501	

Service vehicles

Plasser Theurer Tamping Machines, Type 0716

Delivered to Ruislip from West Ealing \*

771 - 772 - 773 29th (No prefix letters as yet)

Note \* arrived at Felixstowe from Austria 21.4.80.

Machine numbers 1756, 1757 and 1758 respectively.

NEWSFLASHES

- NF 158/80 There are still some de-icing trailers in service that do not yet have the letter 'D' applied under the car number. Those are: 1973 stock - 606, 622, 638, 640, 648, 652; 1972 MkII stock - 4352; A60 stock - 6100, 6106, 6114; C69 stock - 6547, 6554, 6555. However, 1973 stock trailer 630 has the letter 'D' crayoned on.
- NF 159/80 D stock unit 7500/01 currently allocated to the C.M.E. Design Division made four test trips between Harrow and Rickmansworth on 15.4.80
- NF 160/80 Overhauled 1938 tube stock 4-car unit 11204 (ex-Acton on 21.3.80) returned to Acton on 1.4.80 to pick up overhauled 3-car unit 10151. This is one of the rare occasions that a newly overhauled set has returned to Acton. The complete seven cars made a test run to Amersham and back on 15.4.80, and have subsequently been on braking tests between Acton Town and Northfields on the test tracks, being temporarily based at Northfields.
- NF 161/80 A GPO coin-operated telephone booth has been installed on the northbound Metropolitan and Jubilee platforms at Finchley Road station.
- NF 162/80 Further to NF2234 in UN207, there are now only two signs visible at Kings Cross main line station, referring to the Underground. The one 'To the Metropolitan Railway' can be seen whilst leaving main line platforms 1-4 and the one 'To the City & South London Electric Railway' can be seen leaving platforms 5-8. At Farringdon, similar refurbishing work has revealed the wording 'Metropolitan Railway' on several noticeboards on platform 1.
- NF 163/80 A plan to spend £1,800,000 on extending and providing new car parks at stations, approved in 1978, has been dropped as the demand from passengers has decreased. On the Underground, this was to have been at Brent Cross, Hatton Cross, High Barnet, Hillingdon and Rayners Lane, and on BR at Bickley, Highams Park, St. Mary Cray, Twickenham and Sidcup.



The Circle and District Line Edgware Road services were suspended from about 1830 on Saturday 26.4.80 until about 2000 on Sunday 27.4.80, due to the collapse of a wall in Praed Street, Paddington, backing onto the Circle and District Line tracks. Trains thus reversed at Edgware Road (Circle, inner to outer) and High Street Kensington (Circle, outer to inner and District, east to west). Similar arrangements operated on Sunday 27.4.80, with six trains providing a 15 minute service between High Street Kensington and Edgware Road via Aldgate. The trains were specially numbered 101-106. It was first proposed to number them 181-186 to avoid confusion with set numbers from other lines, but it was soon realised that there were no plates with '8' (or even '9') on and thus 101-106 was chosen, although it is believed that some trains did operate using the 18x numbers with the existing plates suitable 'doctored' with chalk.

On Sunday 27.4.80, the trains were:

101	5709+5555+5604	
102	5721+5603+5543	
103	5722+5521+5545	(assumed - confirmation, please ?)
104	5544+5727+5515	
105	5728+5724+5723	
106	5726+5598+5534	

With these trains operating between Edgware Road and High Street Kensington via Aldgate, varying destinations were seen. In addition to 'Circle Line', several trains also showed the actual destination - so a train could be seen leaving Edgware Road for High Street Kensington, with the latter on the blind - technically correct, but a long way round to get there!

Probably the most interesting working was the operation of a single line shuttle service between Paddington (Circle Line) and High Street Kensington (platform 1) on the inner rail, numbered 125 and formed of units 5707+5581+5584. This stayed as 125 after the incident was over, working as booked on the outer rail. Whilst working as a shuttle on the single line, permanent destinations were displayed - 'High Street Kensington' at the west end and 'Paddington Suburban' at the east end. While the latter was not technically correct (as this is the Paddington H & C station) this is probably the first legitimate use of this blind since the stock was new. (All reversing facilities at Paddington Suburban for LT trains was eliminated in 1967 when the main line station was resignalled and LT tracks segregated from the WR tracks).

An engineer's train was worked to Paddington on Sunday morning and comprised flat wagons and battery locomotives L44 and L25. It departed at about 1645, returning to High Street Kensington 'wrong line'.

From Monday 21.4.80, the 1830 from Baker Street to Amersham has been altered to start from Liverpool Street. From the same date, uncoupling has been re-introduced in the midday off peak and on Sundays.

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