UNDERGROUND

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LT's NEW VENTURE IN PUBLIC RELATIONS

This summer LT are trying out a pilot scheme of visits by the general public to some of its more important establishments. During the period from June to September, the travelling public will be able to go behind the scenes to see what makes LT tick.

As it is only a pilot scheme, the choice is limited, but applicants can choose a trip on one of the automatic trains on the Central Line between Hainault and Woodford; a demonstration on the "Skid patch" at the bus driver's training school during a tour of Chiswick Works; or a visit to the new control room of Lots Road Generating Station. Also on the list are the White City Railway Training Centre with its model railway, and the Food Production Centre at Croydon which supplies the Board's 165 canteens and provides meals and refreshments for its 74,000 staff.

A spokesman has stated that if the scheme proves popular it may be extended next year and that it is being tried out because of the considerable increase in recent years in the number of requests for visits received. For the pilot scheme, numbers are limited; the minimum age for visitors is 15 and applications are being dealt with on a 'first come, first served' basis, parties being limited to a minimum of 12 and a maximum of 35. Duration of visits will be from $1\frac{1}{2}$ to 2 hours.

LT are to be congratulated on this scheme which will surely help in maintaining the goodwill of the public.

If any of our Members wish to go on any of these visits, applications from individual members of the public will be welcomed we understand, and should be sent to the Public Relations Officer, LTB, 55 Broadway, Westminster, London, S.W.1. The dates are :-

Railway Training Centre White City	-	June 14, July 5, August 2, August 23
Automatic Train Woodford	-	June 18, July 16, August 13, September 10
Generating Station Control Room Lots Road	-	June 15, July 13, August 10, September 7
Bus Works Chiswick	-	June 16, June 30, July 14, August 4, August 18, September 1
Food Production Centre Croydon	-	June 15, June 29, July 13, July 27, August 10, August 24

METRO-LAND LINK IS SEVERED

D.F.Edwards

Most of us have heard the word 'Metro-Land' used to describe the area served by the Metropolitan Railway in Middlesex and Buckinghamshire; in fact the north-west suburbs of London more of less owe their birth to Metropolitan publicity.

The recent death of Mr. J.Garland of Rayners Lane, Harrow, has severed a link with Metropolitan days. Mr. Garland worked for many years as a copywriter with the publicity office of the Metropolitan, later joining the publicity office of London Transport, from which he retired a few years ago.

One day before World War One, Mr. Garland was given the problem of finding a suitable title for a projected guide-book to be issued by the Met annually. The idea was to publicise the attractions of the Middlesex and Chiltern countryside. The book was aimed at the walker, cyclist and, later the house-hunter.

It was while recovering from an illness that Mr.

Garland thought of the title ... "Metro-Land". The Publicity Manager of the day accepted it and a famous name was born.

In the 1920's and '30's it became the slogan used on most of the Met's publicity material and was even engraved on the doorplates of the T stock - where it could still be seen until a few years ago. Metro-Land books and Country Walks (another series) were read by thousands, who went to the Chilterns and later settled on the lands around Harrow in housing estates that were advertised in the books. Indeed. the Met sponsored estates through its subsidiary, the Metropolitan Railway Country Estates Limited (a company that still exists).

Looking back through the pages of 'Metro-Land', one is easily transported (by locomotive-hauled 'Dreadnought' stock, of course!) to a land of mellow villages (the colour plates always made places look like autumn!), and to fields and lanes that are lost now under the tide of London or the dust of traffic in the Chilterns.

Perhaps the small quirks in the literary style of 'Metro-Land' makes the books all the more endearing today. For instance, almost every picture caption began with 'At' - thus 'At Ruislip' or 'At Wendover', year after year! There are fascinating glimpses of rural Rayners Lane, or Brill's windmill; lists of long-forgotten holiday homes and restaurants such as 'The Poplars' at Ruislip.

Later issues feature the new housing estates which the Met sponsored and which even today are sometimes described as 'Met' houses by estate agents. It might be rightly said that James Garland not only invented 'Metro-Land', but helped to create one of the more pleasant parts of London suburbia.

UNANSWERED QUESTIONS ANSWERED

In the May issue, on p.70, we reprinted certain questions which had been asked previously in the Journal, but had not been answered. Our Vice-President, Mr. H.V.Borley, has now supplied answers to three of these, which we print on the next page.

Metropolitan Brake Vans

The rear of these vehicles were painted red for very many years, possibly from the opening of the railway. The brake ends of North London Railway vans and those belonging to a few other railways having "train sets" were also red.

Verney Junction and Brill Branches

The Aylesbury & Buckingham Railway was worked by train staff and ticket, the only crossing place being Quainton Road. When the Metropolitan doubled the line, normal Metropolitan signalling applied. After the formation of the Joint Committee the regulations of the Great Central Railway applied, possibly slightly modified. Following the withdrawal of the passenger service, the line between Quainton Road and Verney Junction was reduced to single track worked by train staff and ticket.

The Brill branch was always "one engine in steam" with train staff. In the early years this branch may have been worked without signalling or other security. (Editor's Note - Some of the train staffs from both of the above branches are now in the County Museum at Aylesbury).

Northwick Park

The original station at Northwick Park consisted of an island platform nearer to the Great Central lines than the present platform is. At that time the Metropolitan was only double track. The present platform was brought into use in 1931. The subway is a public footpath and was built when the railway was constructed. The original portion, also that under the G.C. lines, is narrow. The later extensions under the newer Metropolitan lines are considerably wider. If I remember correctly the original entrance to the station led off this subway, and tickets were issued and collected at ground level. For many years after resiting the ticket barrier was at the foot of the stairs.

PICKING UP 'THE JUICE'

K.R.Benest

After some thirty years of unified control the conductor-rail system of the London Transport railways is, and for many of those years has been, standardised insofar as gauging is concerned, whilst the rail types have also been reduced on the running lines to some three or four standard sections. Only in sidings and depots are there to be found occasional hints of the mighty variety of traction current supply arrangements which were once to be found in various parts of the system.

The City and South London Railway, originally conceived as the cable-hauled City and Southwark Subway, and consequently saddled with the single-road termini favourable to this modus operandi, opened as an electrically operated line in 1890. The use of an overhead conductor had been in contemplation, but space did not permit, so a conductor rail was laid in 10 lb/yd inverted channel section on glass insulators* in the "four foot". This third rail was not symmetrically disposed, but was offset 1'3" to the east of the centre line of each road, and with its top surface one inch below that of the running rail. This, at first sight peculiar, position was necessitated by the very small clearances imposed by the original 10'2" internal diameter of the tunnels. A central position was precluded by the location of the bar-and-pin combined central coupler and buffer - itself but a couple of inches above rail level, whilst the sub-normal elevation allowed the maximum clearance between the conductor and low-hanging gear under car floors.

The shoes on the original locomotives took the form of a dished cast-iron plate some 10" square, hinged to an insulated bracket carried low on the headstock. Electrical isolation was achieved by raising the shoes clear of the conductors by cords attached to the free ends. At crossovers an elaborate system of wooden ramps, inconjunction with moveable "bridges" - further

*For the purposes of the dissected Crompton-Parkingson motor exhibit in the Science Museum, London, it would appear that porcelain tunnel telephone insulators have been substituted, the correct items not having been stocked for many years.

pieces of timber operated in connection with the point rodding, and which rotated to complete the ramp over the opposing running rails - was provided to enable the shoes to pass without occasioning a short-circuit. A side effect of this cumbersome arrangement was the temporary extinction of every light in the train; the onus was laid upon the driver to "rush" the crossing with sufficient momentum to avoid stalling on the gap, a difficult matter when recovering from a signal check on the sharp curve and heavy gradient outside the old King William Street station.

Several schemes were drawn up in the nineties for the electrification of the Inner Circle. In July 1896 the Thames Iron Works and Shipbuilding Company Limited recommended a 100 lbs/yd channel section "carried on glass or earthenware insulators carried on the sleepers between the rolling metals". As actually adopted on the C.& S.L.R., a 550-volt 3-wire D.C. system was in contemplation, the conductor rail of one track forming the positive side, that for the other direction, the negative, whilst the "rolling metals" or running rails, bonded together, provided the earthed central conductor. A similar arrangement, using 85 lb/yd conductor rail set 1½" above running rail level, was adopted by the Central London Railway, opened in July 1900, and some such was initially contemplated by the Great Northern and City Railway, authorised in 1892 and opened in 1904.

We must note here the two electric traction experiments which the Metropolitan Railway conducted at the end of the century. The better known of these, entered into jointly with the Metropolitan District Railway, involved the electrification of the latter's lines between High Street, Kensington and Earls Court (Warwick Road), to demonstrate the practicability of converting a working steam-operated railway without interference with existing traffic.

Two 75lb conductor rails, inverted channel iron again, were laid, one on either side of the running rails at 12½" from gauge line and 3" above the running surface. The duplication of conductors was adopted, probably to eliminate the effect of stray earth currents upon the block signalling system. (The latter, incidentally, customarily derived its earth return from the gas

main, laid through the tunnels, and in which a high-resistance connection had been already the cause of a collision at Baker Street - the Met was still a little "touchy" at the recollection).

The same system was adopted for the slightly earlier Wembley Park experiment, conducted on a no long-removed siding which extended from the company's station to the Watkin Tower (a site now covered by the Stadium). There was in this case foreknowledge of details of the High Street installation, coupled with a desire to standardise, it being assumed that this was the system destined to be used in the future by the two companies.

Only one other London railway used this system: the little independent Great Northern and City Railway was so equipped from its opening until the line was completely reorganised by London Transport in 1939. The 80 lb/yd inverted channel rail was laid in 42'0" lengths, 10" outside the gauge line and 2" above the running rails. The G.N. & C.R. was purchased by the Metropolitan in 1913, but the new owners made no attempt to standardise with their own equipment. The matter did receive consideration in 1931, at a time when some Metropolitan motor-cars, superseded on their own line by the new G.E.C. stock, was being put out to grass (!) at Drayton Park, but under the shadow of amalgamation the subject was allowed to drop until the implementation of the newly-formed London Passenger Transport Board's 1935 programme.

Turning now to the Metropolitan District Railway, we find a very peculiar arrangement put forward by (presumably) James R.Chapman, Tyson Yerkes' engineer, in June 1910, whereby both positive and negative rails, of 100 lb/yd Vignoles section, were located at 8" centres and a mean distance of 1'7 5/8" outside the gauge line, and at a common height of only $1\frac{3}{4}$" above rail level. A twin insulator was designed, which provided, not only for the rails to be clamped in position by their bottom flanges, but also support for a wooden separator which was apparently to run the full length of the conductor rails. Twin shoes supported by linkages mounted on common transverse beams attached to the motor bogies would have provided for current collection, but whether or not this peculiar layout was

ever tried on the ground is not known. It was certainly a most dangerous arrangement, as well as extravagant in the use of timber, and possessed the further disadvantage that the common insulator and the timber separator would have provided excellent tracking paths for leakage currents. Furthermore, it would have been most unsuitable for adoption on the tube lines in which the Yerkes-Speyer group was becoming interested, and this in turn would have led to difficulties in any proposed interworking - we may instance the operation of Great Northern, Piccadilly and Brompton trains over District metals to reach their original car sheds at Lillie Bridge as a beginning.

Before American interests acquired control of the M.D.R., the District and the Metropolitan has agreed to the employment of the Ganz 11,000 volt 3-phase system on the Inner Circle. This fantastic proposal would have involved the use of two high-voltage overhead wires, the third conductor being formed by the running rails. The intended position of these wires was not, as might be anticipated, symettrically above the tracks, but set close against the tunnel walls at a point just above the car cant-rail level. It is not, of course, customary for intending underground passengers to hail an approaching train by waving a furled umbrella, but clearly special precautions would have been necessary at stations - the problem presented by points and crossovers with such a system also demands careful thought. Clearly two sets of pantographs, one each side, would be required, leading to the further problem of persuading the idle set to fold up obediently rather than reach wildly in search of wire that had ceased to exist. All things considered, the Metropolitan should have been - and perhaps were - truly grateful that the arbitration of Lord Alfred Lyttleton should have favoured Yerkes and his 600 volt D.C. system, the latter presently with us.

The ultimate standard, adopted by the District, the Metropolitan, the Hammersmith and City, the Baker Street and Waterloo, the Charing Cross, Euston and Hampstead and the Great Northern, Piccadilly and Brompton was, of course, the familiar one wherein the positive rail lies 1'4" outside the gauge line (all these measurements are quoted as from the inner face of the running rail to the centre-line of the conductor rail), whilst the negative is centrally positioned in the "four-foot",

respectively 3" and 1½" above running rail level. Practices have changed over the years; it is no longer "done" to place short lengths of positive rail in the "four-foot" at points, nor, except in very acute-angled cases, do we see negative rail laid inside diamond crossings: side-ramps, universally used on the Southern's system, have given way to breaks in the main rail, connected by an auxiliary rail and flexible bonds and end-ramps, themselves more evenly graduated than in earlier days; the use of dummy-ramps at the entrance to non-electrified sidings has also fallen into desuetude.

Uniformity was by no means achieved over night. The C. & S.L.R. was not converted until modernised in the early '20's. Until the unfortunate collapse of the workings which enforced the closure of the entire line for several months in 1923-4, and enabled the change to be made without an interim period of interworking, there were peculiar proposals to superimpose conductors to Charing Cross, Hampstead and Highgate standards upon the old C. & S.L.R. equipment, bonding the two "negative" conductors together and bonding the new "positive" conductor to the running rail earth.

On the District, the negative rail, normally insulated, was bonded in 1915 to the running rails on the Putney-Wimbledon section to enable London and South Western Railway trains to work on the third-rail system over the same metals. The redundant insulators were eventually replaced by plain wooden blocks, which remain today. A special isolating section is laid on Putney Bridge to prevent the bridging of the section gap by the bus-lines of a passing train.

When the Central Line was to be extended under the 1935 programme, it was decided that major overhaul work, hitherto carried out at the old Wood Lane shops, would for the future be effected at Acton Works. The central third rail was still in vogue on this line, and ingenious circuitry was devised, but never installed, to operate contactors which should change automatically the motor connections from earth to fourth-rail return when passing from C.L.R. to M.D.R. territory at Ealing Broadway, and vice versa on the return journey. Something of the sort would have been necessary in 1920-21 if the proposed projection of the C.L.R. to Richmond had eventuated; but, as with so many similar ideas, it was fated not to be.

Ultimately the line was converted to four rail working in April 1940. Owing to mis-alignment of the original tunnel segments, clearance for the positive rail was very tight in places. A special conductor section had been devised in the form of an inverted right-angled isosceles triangle, but this was never used, and short lengths of inverted 'L' section were substituted, with copper bonds in parallel to improve the conductivity. Even so, the positive rail had to be set $4\frac{1}{2}$", instead of the standard 3", above the running rails over short lengths. The original centre rail served without modification as the new negative return, but will be standardised eventually.

The original 100 lb/yd flat-bottomed rail used in open sections is now in course of replacement by 150 lb section. Wear and weathering have been found to have reduced the old rails to but half their original cross section in places, so increasing voltage drop in the conductors. Similarly the rectangular tube-tunnel conductor section is being increased from 85 lbs to 130 lbs/yd.

Depot roads and sidings on District and London Electric Railway lines utilise old bull-head running rail mounted in a special square-based two-piece chair set on top of the insulator. The relatively low conductivity of this rail precludes its use on running lines.

Owing to the danger to maintenance staff normal conductor rails are not permitted in car-sheds. When it is required to move a car under power, use is made of a four-wheeled trolley having insulated grooved phosphor-bronze wheels through which it picks up current, in a manner familiar to "two-rail" model railway enthusiasts, from the parallel bus-bars on which it runs the full length of the shed beneath the roof trusses. From the trolley depends a flexible cable and a double-pole socket which is attached to a receptacle on the car under-frame.

Finality has yet to be reached. The recent decision of the London Midland Region to abandon four-rail working on their London local lines in favour of the three rail system has created on the Turnham Green-Richmond section a state of affairs similar to that pertaining on the Putney Bridge-Wimbledon line. On the latter section

trains are normally required to coast over the isolating portion, which is resistance-fed from one end to operate the car lighting and auxiliary equipment only and not the traction motors. The new sections, lying between the Turnham Green and Bollo Lane junctions, are fed by contactors operated from track circuits. The special section is normally fed by a contactor at the entering end. When a train has completely passed this gap this contactor opens to isolate the section, but after a brief time-delay the contactor at the exit end closes to feed current from the section in advance. Drivers are required to reduce to series operation of the motors when passing over these special sections. When a train has left the section the contactors are restored to their original positions.

VICTORIA LINE PROGRESS REPORT - 3

P.R.Davis

The preparatory stages having been disposed of, contracts having been let and work started by the end of 1963, most of 1964 was devoted to unspectacular progress. Tunnelling was put in hand or continued from the numerous working sites, and work continued on the various alterations and diversions needed on other lines to enable the Victoria Line construction work to continue as planned.

From the point of view of the travelling public, the most important change brought about because of the works was the withdrawal of all trains services between Finsbury Park and Drayton Park on the Northern City Line. The last NC train ran between these two stations on Saturday, October 3, and since then the service has been operated by a special coach service for rail passengers only, with a special booking office opened in Wells Road, Finsbury Park, to sell tickets to the coach passengers. This changeover was fully detailed in the Journal for 1964 (p.161 & p.171) and 1965 (p.5)

Late in 1964 was announced, in connection with the modernisation of Lots Road Power Station, that extra provision was being made for the current required by the Victoria Line. The original plan was to instal five new turbo-alternators each generating 30,000 kilowatts and so

giving the station a total output of 150,000 kilowatts, 50 cycles a.c. at 22,000 volts. In view of Victoria Line requirements, it was decided to increase the capacity to 180,000 kilowatts by the installation of a sixth alternator.

The distribution point for power to the Victoria Line will be a new switch-house at Euston; this is to be a double-storied building in Cobourg Street which, as well as acting as the distribution centre for the whole of the new line will also house one of the substations, of which there will be a total of nine altogether. The preliminary work for installation of the 22,000 volt cable run from Lots Road to Euston was commenced during 1964 and accounted for platform excavations along the Circle Line between Cromwell Curve and Euston Square.

The new line will require 55 miles of high tension cable and 25 miles of control cable. The switch-house will reduce voltage from 22,000 to 11,000 volts, at which pressure power will be supplied to the substations; these will convert it from 11,000 volts a.c. to 630 volt d.c. by means of transformer-rectifiers for traction current and 600 volt 125 cycles a.c. for the signalling system by means of frequency-changers. The compressed air for point and train stop operation will also be supplied through the substations which will be situated, in addition to Cobourg Street, at Gillingham Street, Pimlico; Dover Street (in the basement of the disused tube station there); Pretoria Avenue, Walthamstow; Seven Sisters, Tottenham; Northumberland Park; Manor House, Drayton Park and Cloudesley Road, Islington. All but those at Pimlico and Dover Street are surface buildings, or will be when erected.

By the end of 1964, Northumberland Park depot had a power supply; this had been switched on at 00.01 on Tuesday 1st December, but is being obtained temporarily from Eastern Electricity Board sources, Power is needed for charging the battery loco in use there.

By mid-February 1965, work was commencing on a four-month project by Soil Merchanics Limited to consolidate the ground below Victoria main line station; two workings sites were used, being respectively on platforms 5 and 6, and on the cab road between platforms 7 and 8. About 3000 $1\frac{1}{2}$" pipes were driven 35 ft into the ground in an area 350 ft long laying diagonally below platforms 4 to 7 of the terminus; once all the pipes were in situ, chemicals

were injected under pressure to form a layer 5 ft thick and as hard as concrete. The 30 ft diameter crossover tunnel is being driven in this area, and as it will only have 7-8 ft of clay above stabilisation of the ground is a necessity. This work, the cost of which was £130,000, was the first occasion in the Victoria area when consolidation from an 'indoor' site had been necessary; similar work has been going on nearby for some time - but from outdoor or underground sites. The work did not affect Southern Region train services.

On the 22nd February 1965 a new stairway was opened at Oxford Circus, for the use of Central Line 'up' passengers moving out of the station. This connects the platforms to the escalators; the stairs previously used by 'up' passengers were transferred to use by passengers going down to the Central Line platforms from the escalators, and the previous 'down' stairway was closed. This was necessary to enable work to be started on a new Central/Bakerloo/Victoria Lines interchange passageway.

March 8 saw the bringing into use of the first section of the reconstructed Underground station at Euston, when a new flight of escalators, a new ticket office, and, pending completion of the main line station rebuilding, two temporary entrances were opened. These serve the Charing Cross branch of the Northern Line. The escalators are the first ever to be used at Euston, and when the new station is completed there will be eight in all to replace the 57-year-old lifts.

One of the new entrances is in the north-east corner of the temporary main-line station forecourt which opens off Melton Street, while the other gives access to the old main line forecourt almost opposite the barriers to platforms 11 & 12 and serves the passengers wanting the BR (LMR) local electric services, Both entrances give on to staircases leading to a subway on one side of which a temporary ticket office has been installed in part of what will become a new ticket hall to replace the existing Northern Line hall and provide for the Victoria Line also. Beyond the ticket office, a flight of two escalators leads to a lower subway which gives access to the NL Charing Cross branch platforms. The subway opens on to the north end of the southbound platform where there is an opening to the northbound platform.

Passengers for the City branch of the Northern have to continue using the old ticket office and lifts, but with the reduction in numbers brought about by the opening of the escalator bank, one of the three lifts was taken out of service after the other two had been overhauled; the shaft is being used as part of the ventilation system for the reconstructed station. The new entrances are open each weekday from 06.00 to 20.00; at other times passengers for the Charing Cross branch use the lifts as hitherto.

The new escalators have aluminium alloy panelling and ribbed aluminium treads, while the roof of the shaft is of laminated plastic. The reconstruction work includes in addition to the part now opened a further three banks of two escalators, additional interchange passages at low level between the two branches of the Northern Line, half a mile of new tunnel and a new platform for the northbound Northern Line City branch trains. Diversion of trains to this tunnel is necessary to enable the Victoria Line platforms to be built between the City branch platforms and so provide same-level interchange facilities. The cost of the reconstruction will be £2¾m, and it is expected that passenger usage on completion (and when the Victoria Line is open) will be 14 million a year.

Special leaflets were issued to passengers prior to the opening of the new entrances, to acquaint them with the arrangements.

In March 1965 also, there was a seepage of water into the Victoria Line tunnels between Euston and Kings Cross. Part of the tunnel face caved in beneath British Railway's Somers Town Goods Depot. About 300 cubic yards of mud and silt rushed into the tunnel, and the depot above was closed temporarily as a precautionary measure until safety was assured.

On 31st March 1965, details of the new rolling stock were announced by the Board, and on the 7th April followed information relating to contracts for traction motors and gears; this subject will be covered by a special article next month.

CHESSINGTON AND THE UNDERGROUND

As will be seen from the Timetable this month, the Society's Family Outing this year will be to Chessington Zoo; the object of this brief note is to fill in the

historical background, for, although an Underground service has never reached the immediate area, it has been a very near thing several times.

Promoted as an independent company, the Wimbledon and Sutton Railway obtained the Royal Assent to its Act on the 26th July 1910. This was for a line of some 5½ miles from Wimbledon to Sutton, via Morden and Cheam. Unfortunately for the project, the necessary funds could not be raised; the Metropolitan District took over the company in 1913, purchased some of the necessary land and altered the station and fences at Wimbledon - all before the outbreak of World War I. After that, nothing was done except to obtain various extensions of time.

In 1922 the City and South London Railway promoted a Bill for its extension to Morden, where it was provided that there should be a junction with the still unbuilt W. & S.R. At the same time a London Electric Railways Bill was presented which provided for other links between the two tube lines - namely an extension of the Hampstead line from Charing Cross to Kennington to meet the C.&S.L.R. and the Bakerloo. These proposals created such a storm in the London and South Western Railway that discussions were opened almost at once, and of course the L.&.S.W.R. opposed the project most forcefully. Eventually a compromise was reached whereby the (by then) Southern Railway took over the Wimbledon and Sutton powers, and the City and South London was to terminate its extension at Morden, but with no connection with the W&S. The District was to have running powers over the latter which was duly built and opened in 1929 (Wimbledon to South Merton on July 7) and 1930 (South Merton to Sutton on January 5). The District has never exercised its running powers over the line.

But all these were a few miles away from Chessington; in 1948 however, among the lines approved by the BTC for small-diameter tube lines was one of lower priority designated Route E. This was to be a line parallel to the Northern Line between Kennington and South Wimbledon, whence it would divide; one branch was to go to Raynes Park and Motspur Park from where trains would run over the Southern to Chessington South; the other branch was to be to Morden and North Cheam. This line, it seems, would have used the deep level shelters at Stockwell and Clapham.

THE TIMETABLE

Saturday 9th July PLEASE NOTE - the Visit to Lillie Bridge Depot is POSTPONED indefinitely at LT's request.
Saturday 16th July (provisional) Visit to Stewart's Lane Depot, Southern Region - where it is hoped to see the tube stock being prepared for service in the Isle of Wight. Names to the Secretary as soon as possible, at 62 Devonshire Road, Ealing, London, W.5. Only unsuccessful applicants will be notified. Meet at Wandsworth Road station at 09.31.
Sunday 31st July Family Outing to Chessington Zoo. As this is a very local outing this year, no travel arrangements are being made. Reduced Rate Fares are available from many stations in the London area. A lunch is being arranged, with a cold menu provided, at a cost of 6/3d each (special meal for babies 2/6d); those wishing to book a meal, please send their names and remittances to Joe Brook Smith at 34 Barnehurst Road, Barnehurst, Kent by July 15th. The Party for Lunch will meet outside the Mansion in the Zoo grounds at 12.45.

NOTICES

The Travellers' Association Joint Committee are endeavouring to raise £300 to fight recent London fare increases.
Proposed Sale of Relics This will take place shortly, but more material would be welcome; anyone having a relic to donate (or to sell with a commission to the Society) is asked to write to our Curator of Historical Relics at Fairmead, Northway, Pinner, Middlesex giving details.
Journal Back Numbers The following issues of UndergrounD are available from our General Sales Manager at 35 Montholme Road, Battersea, London, S.W.11. The price is 1/- each, and only limited stocks of each are available:

1962 - Feb;Mar;Apl;May;Jun;Jul;Aug;Sep;Oct;Nov;Dec.

1963 - Jan;Apl;May;Jun;Jul;Aug;Sep;Oct;Dec.

1964 - May;Jun;Aug.

1965 - Apl;May;Aug;Dec.

Back numbers of 1966 are obtainable, if available, from the Registrar at 134 Cranley Drive, Ilford, Essex.

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