

U n d e r g r o u n d

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THE 1961 REPORT

The Report of the London Transport Executive for last year, published in August under the title "London Transport in 1961" is of more than usual interest, and shows very clearly the steady trend of London's traffic towards self-strangulation.

A decrease of 2.1 per cent in the number of passengers carried by all LTE services during the year is reported, but the whole of the drop was on the road services, the railways actually showed an increase of 0.2 per cent over the 1960 figures - the total number of rail passengers in 1961 being no less than 675 million. It is interesting to note that, despite this increase in numbers, the passenger-miles travelled fell by 4.5 per cent - the average length of journey in 1961 being 4.53 miles as against 4.75 miles in 1960. The report comments that "this shortening of the average length of ride, which has been noticeable on the railways for a number of years, is another example of the loss of longer-distance traffic resulting from the increased use of private cars for these journeys and the increasing use made of the Underground for short journeys in Central London".

The motor car is shown to be the biggest menace to mobility in the central London area; the ever-increasing number of cars coming into London in the rush-hours, usually conveying no-one but the driver, are causing problems out of all proportion to the benefit derived from them by their users. Public transport road services are made irregular by the congestion, with a consequential loss of traffic which is accentuated by diversions brought about by the network of one-way streets - diversions which often take the buses away from the points where they are most needed. In many cases, too, the diversions entail extra mileage being run, increasing running costs as well as causing a fall in receipts.

That the commuter is solving his difficulties by taking to the railways is clear, for British Railways rush-hour traffic in 1961 also shows an increase over that of the previous year. There can be no doubt that the only solution for the present

2 traffic problems is an improved Underground system, and it is an encouragement indeed to those who have advocated this for years to learn - since the publication of the report - that the Victoria Line has been authorised by the Government. London Transport have been advocating this for years, and it is perhaps a pity that the wisdom of its counsel was not realised earlier by the Ministry of Transport. The report under review, speaking before the authorisation was made public, states that building the Victoria Line would avoid the necessity for heavy expenditure on improving the capacity of other lines, which would only be of benefit for short periods each day, and that it would provide valuable new connections which would be of use to travellers all through the day.

The report contains full details of all changes on the Executive's railways (and of course in the road services) in 1961, together with financial accounts and statistical tables, and is obtainable from LTE at 2/6d.

BOOK REVIEWS

THE LAST MAIN LINE Photographs by S.W.A. Newton, Edited by R.D. Abbott. Leicester Museums. Price 4/6d.

At the time the Great Central Railway was commencing its new London extension, a young Leicester man named Newton had just joined his family's photographic business. Being interested in the construction of the line, he made a photographic record of progress which extended to many hundred pictures. Many years later, the negatives were presented by Mr Newton to Leicester Museum, and this book contains about three dozen of his pictures together with a short introductory article, a map of the line, and a reproduction of a timetable cover of 1899. The pictures are excellent, well produced and captioned in an original way; this book will be of great interest to all who follow the affairs of the railway which ran over Metropolitan metals from Quainton Road to Finchley Road, and later joined with that company in the Metropolitan and Great Central Joint Committee.

THE AYLESBURY RAILWAY by E.J.S.Gadsden. Bledlow Press. Price 5/-
This line, opened on 10th June 1839, was the first railway to reach the town after which it was named, and ran thereto from a junction with the London and Birmingham at Cheddington. At one time there were plans for it to join the Aylesbury and Buckingham's line, but the connecting line, although started on, was never completed - had it been the history of railways in this part of Buckinghamshire might well have been very different. This small book, a companion volume to "Duke of Buckingham's Railways", provides a brief history with illustrations and map.

Programme machine control was introduced at Tooting Broadway on 29th July 1962 and a similar installation was completed at Morden over the weekend of 11th-12th August 1962. This system of automatic junction working has been in use on this line at Kennington, Euston, Camden Town and East Finchley for some time, but the new installations have some important new features - in general signals and points have not been disturbed, only the control method being changed.

Two programme machines have been provided at Tooting Broadway. They can deal with all normal signal movements, including those required for shunting into and out of the reversing siding. This siding has its own tunnel between the running tunnels south of the station and is used regularly for reversing trains. One programme machine controls all southbound movements through the station to Morden or into the reversing siding from the southbound track, while the second machine controls all northbound movements from Morden or the siding. The signal controlling movements from the northbound platform into the reversing siding is not under programme machine control. Supervision is from Leicester Square, as it is for the other Northern Line programme machines. In emergency or other special circumstances the signalling at Tooting Broadway can be controlled by push-button from Leicester Square. Also, if required when no trains are reversing at Tooting Broadway, the signals can be switched to normal automatic working without programme machine control.

The existing signal box at Morden has been replaced by a new interlocking machine room from which all signalling in the Morden area is controlled. The interlocking machine is itself controlled by programme machines housed in the new room. There are seven machines with control functions as follows:-

- No.1 Movements into the station from southbound track
 - No.2 Movements into and out of Platforms 1 and 2
 - No.3 Movements into and out of Platforms 3 and 4
 - No.4 Movements into and out of Platform 5
 - No.5 Movements from Morden Depot into service.
 - No.6 Special train describer machine feeding information to the train describer apparatus
 - No.7 Movements out of the station to the northbound track
- In connection with the above it must be remembered that Platforms 1 and 2 are served by one track, as are 3 and 4.

A relay time counter is associated with machines 5 and 7 to give time control for the clearing of signals giving access to the station area from the depot, and also for the clearing of the northbound starting signals from the station. The time

control associated with machine 7 causes the next train indicator to alter half-a-minute before northbound trains are due to leave. Programme machine 6 operates the train describers and also the train indicator for passengers showing the destination, route and departure platform for trains from Morden; this indicator shows the next three trains, and if necessary the Supervisor at Leicester Square can intervene to alter the indicator and train describers.

Trains working in and out of Morden depot, which is situated beyond the station, are controlled from a ground frame at the entrance to the depot. This arrangement has not been altered, except that a visual indication is now provided to show the shunter responsible for operating the frame that a train is waiting in Morden station to enter the depot. The shunter has also been given a train number indicator which shows the number of the next train to enter service from the depot five minutes before it is due. The programme machines are so arranged that, provided it is the correct time for the train to leave, the outlet signal from the depot will clear automatically as soon as the train arrives on the departure track.

Supervision of the automatic signalling at both Tooting Broadway and Morden is from a new regulating room at Leicester Square. This room is adjacent to the existing Traffic Control Office in Transad House. The existing regulating room at deep level will remain in use for the time being, but eventually all supervision will be carried out from Transad House. The supervisor is provided with an illuminated diagram showing the position of all trains and the aspects of all signals in the areas under his supervision. Beneath the diagram are push buttons for the operation of all the signals and points concerned if it is necessary for the supervisor to intervene. These buttons work on the route-setting principle. The supervisor is also provided with a desk unit from which he can make adjustments to the programme machines. The unit can be connected to any desired machine, and, once connected, the operation of its controls will affect the selected machine only. This desk unit is similar in operation to that provided in connection with the East Finchley programme machines but has some new features, e.g. the train describer at Morden can be altered from it.

A panel is provided at Leicester Square for each programme machine to show the current state of the machine concerned. The panel displays a letter P when normal programme machine control is in use, the letter F when first-come-first-served working is in force, and B when push-button control is being used. The panel connected with machine no.1 at Morden can also show the

letter A, indicating that the facilities provided for the auto⁵matic selection of the first available platform for southbound trains are in use.

If no.7 machine at Morden is switched to first-come-first-served operation it will automatically send trains northwards in accordance with the train describer and ignore the information from the programme roll on the machine. At times when the supervisor has taken direct control, therefore, he has only to set up the train describer manually and the machine will deal with the signalling. In these circumstances, however, it is not possible to provide automatic time control for departure, and the supervisor must operate a special starter button on his control desk 30 seconds before a train is to leave. This causes the train indicator at Morden to step forward into the next position, showing the train after the one about to depart. After 15 seconds the appropriate starting signal clears automatically. The starter button is only required in these special circumstances, and a flashing light is provided at the top of the desk unit to remind the supervisor that it is in use.

Buttons are provided on the desk unit to enable the three indications on the train describer at Morden to be cancelled. They can be reset manually by operating other buttons on the desk unit. Should a wrong platform button be pressed the indication can be cancelled by twisting the button concerned. These platform buttons are illuminated when in use, the light being extinguished when the description has been transmitted to Morden. Up to three train descriptions at a time can be set in this way. A further button on the desk unit will restore automatic working of the train describers when the service has been restored to normal.

To reduce the number of line wires needed, a form of electronic circuit scanning has been adopted which allows five controls to Tooting and Morden, or five indications back to Leicester Square to share common line wires. The only effect of this, as far as operation is concerned, is that there may be a delay of a second or so between the operation of a control and the receipt of the indication showing that the apparatus has responded

COMMITTEE NEWS

At a recent meeting of the Committee, John P.Wirth, the Society's Librarian, was appointed to fill the office of Vice-Chairman also. At the same meeting George P.Jasieniecki was co-opted to serve on the Committee - filling the vacancy which has existed since the Annual General Meeting in March.

Saturday 15th September Metropolitan Tour arranged by the Electric Railway Society - this tour includes a special train round the Watford North Curve, and full details will be found in last month's issue. Names, together with a postal order for 1/- (Juniors 6d) and a stamped addressed envelope, to John R. Bates, 15 Landswood Road, Oldbury, Birmingham.

Friday 21st September 7.30 p.m. Meeting in the Lecture Hall, Ealing Town Hall. Open to all - charge for admission 6d. It is hoped to present a programme of film slides by Chris Gooch.

Saturday 6th October Walk over the Verney Junction Line. Party will travel in the front coach of train departing Marylebone 11.14 a.m., Harrow 11.26 a.m., Aylesbury 12.15 p.m. for Quainton Road. Walk will start at 12.30 p.m. from Quainton Road along the abandoned line to Verney Junction. There will be plenty of time to inspect the interesting station there, and there will be an opportunity for making the short journey to Buckingham by the 5.39 p.m. train before returning by the 6.10 p.m. to Bletchley. From there, connection at 6.42 p.m. arrives Watford Junction (change for Harrow arrive 8.04 p.m.) 7.44 p.m., Willesden Junction (for Richmond) 8.05 p.m., and Euston 8.18 p.m. The visit is open to all and notification is not necessary unless Party Rate ticket is required; party rate fares are 18/6 from Marylebone, and 15/7 from Harrow, Juniors half-price, and if intending to travel on this ticket, please send open postal order in full payment with a stamped addressed envelope to E.J.S.Gadsden, 63 Barrow Point Avenue, Pinner, Middlesex, to arrive not later than 28th Sept.

Saturday 13th October 6.30 p.m. The Tramway and Light Railway Society "O" Gauge Group are presenting a Slide Show at the Euston Dining Club, Cardington Street, London, N.W.1. Over 200 slides will be shown, covering 20 tramway and electric railway systems; refreshments will be available, and admission is free - all are welcome.

Thursday 18th October 2 p.m. Visit to Acton Works LTE. Names to the Secretary accompanied by s.a.e. by 30th September.

Friday 9th November 8 p.m. Place to be arranged. Address on Free Passenger Transport on the Railways, by Ron Ledger, M.P. Some members will have heard Mr Ledger's talk on his scheme in the BBC series "What's the Idea?" on June 29. This evening he will outline his scheme, and deal with member's questions thereon. We are fortunate in obtaining Mr Ledger as a speaker, for Members of Parliament are busy people; it is hoped that as many members as possible will attend, so that Mr Ledger's time is not wasted, and so that our Society is seen by him to be actively interested in current transport problems.

This month we are pleased to be able to offer our members a selection from the J.Milne Collection of London Transport Railway Photographs. This small collection deals primarily with the method used to convey condemned Central and Piccadilly stock to the place of scrapping, and how the actual destruction is done. Lists are available from the Assistant Secretary - Photograph Sales; J.A.S.Milne, Cherrywood, Peterley Corner, Great Missenden, Buckinghamshire. Please enclose a stamped, addressed envelope when applying.

THE VICTORIA LINE

On Monday 20th August 1962, the Ministry of Transport announced that the Government had accepted the proposal to build the Victoria Line, and on the same day London Transport Executive's Chairman made it clear that the Executive would be taking immediate action towards building this new tube line - which they have been advocating for years.

Suggestions for a new underground railway following the approximate route of the Victoria Line have been mooted for many years, but these schemes did not blossom into the post-war light of day, at least not officially, until the London Plan Working Party Report was published in 1949. In this Report the line appeared as Route C, a London Transport tube line recommended for high priority in building and proposed to run from Tottenham or Edmonton via Manor House, Finsbury Park, Kings Cross, Euston, Oxford Circus, Green Park, Victoria, Vauxhall, Stockwell, Brixton, Streatham Hill, Streatham, Norbury and East Croydon. Also proposed in the same report was another LT tube line - Route D - which included an east-to-west underground line across central London from Victoria to Liverpool Street, to continue above ground by electrification of the existing British Railways tracks to, inter alia, Hoe Street, Wood Street (Walthamstow), and Chingford.

Due to financial stringency, only a small proportion of the schemes suggested by this Working Party were given effect to, and neither of Routes C and D were among them - though the electrification of the lines east of Liverpool Street was carried out, though by BR, not LTB. Out of the two routes, however, came a scheme for the Victoria Line, and this was in due course considered by the London Travel Committee, to which it was referred by the then Minister of Transport and Civil Aviation. The Committee reported in July 1959, and was strongly

in favour of the proposals, the last sentence of their report reading "The Victoria Line deserves, we think, the highest possible priority and we have no hesitation in putting forward our recommendation that it should be built and a start made on construction in the very near future".

Before this, in 1955 in fact, the British Transport Commission had obtained statutory authority to build the line, and it was the line authorised by Act which the London Travel Committee considered in 1959; this was a somewhat shortened version of the 1949 routes, commencing at Walthamstow (Wood Street), and running via Walthamstow (Hoe Street), Black Horse Road, Tottenham (Hale), Seven Sisters, Finsbury Park, Highbury, Kings Cross-St Pancras, Euston, Warren Street, Oxford Circus, and Green Park to Victoria. It is this line which is now to be built, with the exception of the section from Hoe Street to Wood Street, Walthamstow, which is abandoned, and realignment at Hoe Street so that the LT station will be below the existing BR-ER station, and not at the junction of High Street, Hoe Street, and Church Hill as originally planned. These changes have been made necessary because, since the Victoria Line was originally planned, the Chingford Line of the Eastern Region has been electrified on the overhead system, and the present cost of alterations there to accommodate LT trains would be far in excess of the benefits to be gained by passengers. The interchange facilities planned for Wood Street will now be provided at Hoe Street. Statutory powers will have to be obtained for these changes in the proposed line.

As it is to be built, the Victoria Line will be approximately $11\frac{1}{2}$ miles in length, and will provide interchange facilities at 11 of its 12 stations, either with other LT lines or British Railways - and in five cases with both. It is expected that about six years will be needed to get the line completed ready for passenger services, and during this time four LT stations will have to be completely rebuilt - Victoria, Oxford Circus, Euston and Kings Cross. Work has already started at Euston, where the rebuilding was brought forward to coincide with the rebuilding of the main line station, and it is expected that the Oxford Circus reconstruction will begin about the middle of September.

The tube tunnels are also partly built; during 1960 an experimental mile of twin tunnel was commenced between Finsbury Park and Seven Sisters, to test new methods of construction. From Netherton Road to Manor House was built in cast iron by Edmund Nuttall, Sons & Co., and from Manor House to Finsbury Park Kinnear Moodie & Co. used concrete construction. These tunnels are now being used for various experiments with Northern City trains, which have a connection to the new tube.

- NF 47 The nickname "The Drain" came into its own on the morning of Thursday 19th July 1962, when the Bank station of the Southern Region's Waterloo and City Line was subjected to serious flooding after a water main burst in a services subway beneath Queen Victoria Street. The line was closed for several hours, but London Transport's Bank station was able to keep open.
- NF 48 A car park for 18 cars was opened at Rickmansworth LTE station on Monday 23rd July 1962; it is on land at the foot of the northbound embankment, below the signal cabin, with the entrance in Parsonage Road.
- NF 49 An LTE census shows that 30,000 more people travelled during rush hours each day during November 1961 than were doing so a year before - an increase of $2\frac{1}{2}\%$; 10,000 of these travelled by Underground, on which the busiest stations were Oxford Circus (34,800 passengers in the morning peak), Piccadilly Circus (25,700), Holborn (25,000), Kings Cross (23,500), Bank (22,600), Moorgate (20,400) Tottenham Court Road and Liverpool Street (20,000 each).
- NF 50 A London ~~Passenger~~ Transport Campaign Committee, sponsored by trades councils, trade unions and political parties, is trying to get an independent inquiry into the London Transport Executive, and is seeking improved transport in London and pegged fares.
- NF 51 Ventilation and noise tests have been taking place on the experimental section of the Victoria Line, with a train from the Northern City. A mile of double tunnel was built for the Victoria Line last year from Finsbury Park to Netherton Road, Tottenham, and a few months ago, one of these tunnels was extended by 350 yds to connect with the terminal end of the Northern City southbound tunnel, thus giving Northern City trains access to the Victoria.
- NF 52 Mr E.W. Cuthbert, M.Sc., M.I.C.E., A.C.G.I., has been appointed by the LTE to the office of Assistant New Works Engineer, in the department of the Chief Civil Engineer.
- NF 53 The lifts at Wapping station, severely damaged by fire on 25th June 1962, were restored to service on 24th July.
- NF 54 The exhibition site in the booking hall of Charing Cross LT station is in use as a cinema again, and until 15th September "London's Country" and "Bridge 114" will be shown ten times each day except Sundays. First performance is at 11.30 a.m., and they continue at frequent intervals until 7.15 p.m. Each showing lasts 30 minutes, and admission is free.

- 10 NF 55 Ex-Chesham branch coach 513 was scrapped at Neasden on 13th August 1962.
- NF 56 T Stock motor coach is said to be scheduled for storing after withdrawal from service, for use in the Metropolitan Railway Centenary celebrations in 1963.
- NF 57 An 8-car train of T Stock was seen on the 30th July 1962 approximately half-way between Chesterfield and Sheffield on the Great Central main line - presumably on its way to the scrapyards.
- NF 58 A62 unit 5136-6136-6137-5137 was seen recently near Darnall nearing completion, together with other cars in various stages of assembly.
- NF 59 Ex-Western Region O-6-OPT 7749 is now at Lillie Bridge Depot being prepared for service on the LT system as L97.
- NF 60 The mysterious service vehicle TV750 is at present alongside the loco shed at Lillie Bridge. Axleboxes indicate that it was originally built by the Wigan Wagon Company, and it appears to be of approximately the same vintage as J682. Both these vehicles are branded "For Yard Use only" and spend most of their time storing tanks etc from locos undergoing heavy overhaul.
- NF 61 Also at Lillie Bridge are the two TLC wagons, tucked away behind the rail shop, and flanked either end by match wagons, the latter having delightful "nature gardens" based on rubble etc - the latter apparently added for ballast weight!
- NF 62 BR Western Region are withdrawing the passenger service from the Uxbridge branch from West Drayton on and from Monday 10th September 1962. As there is no Sunday service on the branch, last passenger trains will operate on Saturday September 8th. Uxbridge (Vine Street) station will remain open for freight services, but Cowley, the other station on the branch will be closed completely.
- NF 63 Ref NF 35 - LTE informs us that this NF is incorrect; CP stock trains are not uncoupled in passenger service to 3 cars, and for several years now 3-car units with only 1 compressor fitted have not worked in passenger service on any line.

Corrections There are several corrections to be made to the articles on reallocation of rolling stock and preparation of new stock at West Ruislip, both of which appeared in August. Information is now being checked with LTE, and will appear in the October issue.
