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Railway Society

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TRENDS

Broadly speaking, the official outlook for the past twenty years has been pro-road and anti-railway, as even a cursory study of government pronouncements will show. For a long time this attitude was fairly consistently challenged from within the rail world, but now we are in the Beeching era this is no longer true. If progress on rail was solely the concern of British Railways in this country, we should see nothing but a steady retraction of services until there was nothing left except a few modernised trunk lines almost completely bereft of branches to feed them.

Fortunately, this defeatist attitude towards their function in life has never prevailed in London Transport. With the lead clearly given by Mr A.B.B.Valentine, Chairman of the Board, the doctrine of an enlarged railway system for London has been consistently preached by LT for some years now. It must be evident to all that this desire to expand has met with little official encouragement until recently, but there are, at last, some indications of a slight shift in official bias - a shift towards the railways, or at least towards public transport.

Government authorisation of the building of the Victoria Line resulted from a major policy decision in favour of rail, particularly pleasing as, according to some methods of calculation, this line is not expected to pay for itself. There have been other decisions recently which are encouraging, too. The Kensington (Olympia) to Clapham Junction service, due for withdrawal on the 5th January 1964, was reprieved a few days before withdrawal date, and it is believed it is being retained because British Railways realised they would lose a large number of main-line commuters who, if they could not complete their journey to Kensington by train, would forsake the railway for the whole of their journey. This danger (loss of main line travellers if the feeder branches are closed) is one which has always been evident to people who believe in railways - but does not usually impress British Railways.

66 There is also the point, of considerable importance in some respects, that the Minister of Transport has not approved for closure every line that British Railways have tried to extinguish. Admittedly, reprieves have been few, but the fact that they exist at all is significant.

While there is, as yet, no concrete plan for transport subsidies in London, several speakers recently - politicians, traffic experts, economists - have expressed the view that private travel will have to be severely curtailed if the city is to survive, and at least one has said that local authorities will have to assist public transport. Outside London, at least one local council, Sunderland Corporation, is actively considering the subsidizing of public transport instead of improving the roads for the use of private motorists. It is admitted that this proposal would subsidize the Council's own bus services - a road facility and not a rail one - but the principle is there and only needs extending.

Finally, there is the new plan for London and the South East, outlined in a government White Paper; this states quite clearly that the railways are to play their part in the expansion envisaged within the next twenty years - railways of both BR and LT.

Are all these just coincidences, or are they straws in the wind? There is reason to believe that they are at least signs of a trend towards serious encouragement of travel by public transport instead of private; it may take time before encouragement of rail travel gets a clear lead over road, either public or private, but it will almost certainly come. The stark truth is that Great Britain is far too densely populated for private cars for all to be practicable - a truth that will be unpopular with motor manufacturers, but not thereby invalidated. One can only hope that the truth is realised before too many useful lines have been closed and torn up.

OVERRUN AT HAMMERSMITH

On 14th March 1964 Hammersmith and City train no.188 overran the buffers when coming out of the sidings at Hammersmith and did quite a bit of damage, both to itself and the station. Platform 2 was damaged, as was the canopy over the platform - the station had been cleared up the next day, with railings across the end of the platform involved. Cause is said to be skidding on greasy rails.

Cars comprising the train were (from the Whitechapel end):-
54002-014098-53002-54245-013179-53045; GP Stock. The damaged car was 53045, which sustained injuries to its front bogie and body - the bogie remained on rail but the body of the coach overrode it and ended up resting on the concourse with its nose in the air. Emergency Tenders present were 418J, 1277LD, 1274LD, 1282F, 832J.

Members may be interested in some further notes on the Met. & G.C. Joint Line concerning stations, signs and signals, particularly if they are modellers. The present article deals with the position today at stations between Amersham and Aylesbury.

As far as the public^{are} concerned this section of line was transferred to the L.M.R. in 1961, but observation shows that in fact this was far from being the case. The three stations, Great Missenden, Wendover and Stoke Mandeville are at present being renovated, and the station buildings on the down platforms are being demolished, possibly to be replaced by a small "bus-shelter" type of building. When last repainted in 1952 the stations were finished in the then-standard scheme for older LT buildings - a grim dark brown with some cream and pale green as relief. The present schemes do not coincide exactly with any present LT style, but are unmistakably LT in character; the paint-tins are marked "LTE Exterior Quality". Wendover and Great Missenden are finished almost identically, but Stoke Mandeville is different.

Modellers would be well advised to visit these stations themselves to discover details, as no less than seven shades of grey are being used, of a total of about fourteen colours at each place! The liveries at all three places can however be summarised as follows:-

All three stations

Canopy woodwork: deep buff. Window frames: cream.
Gutters and pipes: black. Footbridges: pale grey-blue.
Poster-boards: grey, black border and white frame (typically LT).
Gates; non-creosoted wooden fences and walls: some shade of grey.
Doors (other than of main building); black.

<u>Variations</u>	<u>Stoke Mandeville</u>	<u>Great Missenden and Wendover</u>
Doors	Dark (almost navy) blue	"Greengage"-green
Top ironwork under canopies	Pale grey-blue	Pure pale grey
Iron roof-columns	Pale blue	Mid-grey
Porch canopy	Dark blue	"Greengage" at Gt.Miss. Deep buff at Wendover

Enamel signs and tickets are standard L.M.R. and the staff are L.M.R. personnel. The same region maintains the signalling equipment (most signals have been repainted in L.M.R. style), though

signal-boxes, bridges and track are the responsibility of the LTB as far as Stoke Mandeville Hospital. The signal-boxes deserve a note to themselves: prior to the 1952 repaint, the boxes were in LNER wartime livery of blue-grey with cream window-frames; the LNER nameboards were black with white lettering. The same arrangement of colours has persisted ever since, and so the three boxes have always presented an appearance different from LT boxes at Amersham and south thereof and LMR boxes to the north, where in both schemes the main structure has been in light paint with darker framing. In 1952 the three boxes under discussion were finished in the standard LT dark brown, with window-frames and signs as under the LNER scheme, and just before the alleged "take-over" by the LMR in 1961 they were all repainted in the same livery, with the exception of the nameboard at Stoke, the background of which was of the brown body-colour.

At the time of writing the three boxes are enjoying the luxury of a further repaint less than three years later! The dark brown basic colour has been replaced by a light grey, the windows are of a lighter cream, but the nameboards are still as LNER - again with the exception of Stoke, where the board is in light grey the same as the rest of the box; upon this the white lettering is very hard to read. Doors are now black (as at the goods sheds) giving the illusion that they are permanently open; one wonders how long it will be before further wagons are propelled through the apparently-open goods shed doors!

From the foregoing notes it will be seen that whereas the old companies shared the line for maintenance into two halves, the present partners' responsibilities overlap at all stations, so the Joint Line is now "joint-er" than ever!

BOTH-SIDE DOOR OPENING AT BARKING STATION

The eastbound District Line platform road at Barking station has a platform face on either side; both faces belong to island platforms, the other faces of which are served respectively by British Railways services to Southend and to Kentish Town and St Pancras. Hitherto, the doors on the District trains have only been opened on the side serving the Southend platform, but with effect from 3-2-1964, the trains of the District Line will have their doors opened on both sides - thus providing a cross-platform interchange with both the British Railways services concerned. Up to now passengers changing to or from the St Pancras service have had to use the bridge at the eastern end of the platform, or the subway at the west end.

District Line travellers may have noticed a greater proportion of silver cars on their trains in the past few months. This results from a decision made a year ago to give all R stock cars on overhaul at Acton Works an aluminium look.

The 378 cars of the R stock fleet are of four series, all with generally similar characteristics and appearance, but varying in detail. The R38 and R47 cars are of steel construction, but the 90 R49 cars were the first lightweight cars of aluminium alloy construction to be built in any quantity in Great Britain. In 1959, 13 new aluminium alloy cars, known as the R59 stock, were placed in service. These R59 cars were left unpainted, as were nine of the R49 cars, and some steel-bodied R38 and R47 cars were painted with aluminium paint to match.

When the new painting programme began, there were in the R stock fleet 22 unpainted aluminium cars, 12 steel cars painted aluminium, and 344 steel and aluminium cars painted red. The steel cars painted aluminium have kept their condition very well and this is one reason for the decision to use aluminium paint in future. The aluminium painting process is marginally more expensive than the normal red, but the better wearing properties will allow the cost to be offset by an extension of the period between overhauls - roughly from 250,000 miles (five years) to 275,000 miles ($5\frac{1}{2}$ years).

Another reason for the aluminium paint is that the District Line services need nearly 700 cars, 378 of R stock and the balance of CP and Q stock. The Q stock is used on the East London Line and to augment peak services elsewhere. The R and CP stock are alike in external appearance and although the two types of stock can be coupled together mechanically, they will not couple electrically because their circuits are not similar. In an emergency, mechanical coupling may be necessary but it is then essential that an insulating shield is used to keep the electrical contacts apart. When all R stock has been painted silver, which will probably be by 1968, the risk of accidental coupling with CP stock will be greatly reduced, as the CP stock will still be painted red.

More than 50 cars have been painted aluminium at Acton Works since the programme began. During the next few years, as the repainting is carried out trains will often be of mixed colours, but eventually trains will be either all-red CP stock, or all-aluminium R stock.

THE SPEED OF METROPOLITAN A60 STOCK
Frederick F. Brown

A point of some interest arises in connection with the stated maximum speed of the A60 stock and with its actual performance in accordance with timetable operation. It is stated, for example, on page 36 of the LT publication 'How the Underground Works' that this stock "is designed to operate up to a maximum speed of 60mph", but the scheduled working appears to be considerably lower than this.

It is not possible with the average distance between stations on the Underground system for any of its trains, generally, to reach their balancing speeds - usually in the region of 45 mph - as round about $2\frac{3}{4}$ miles is necessary for this on level track, but the Amersham route on which this A60 stock operates, contains the 13-mile section between Finchley Road and Moor Park, which on the north-bound Monday-Friday evening peak-hour journeys is run non-stop; and one section of this, at least, is of sufficient length and freedom from restriction to allow the full balancing speed to be reached and maintained some useful distance beyond. Actually, the performance of these trains, in accordance with the recently accelerated timetable, works out as follows:

<u>Station</u>	<u>Distance</u>	<u>Timetable</u>	<u>Notes</u>	<u>Average Speeds mph</u> /
Finchley Road	0.00 mile	dep	0 min	} -41.97 } } -42.30 } } 41.55 } } -44.03 }
Neasden	3.08 "	pass	$4\frac{1}{2}$ "	
Wembley Park	4.49 "	"	$6\frac{1}{2}$ "	
Harrow-on-the-Hill	7.26 "	"	$10\frac{1}{2}$ "	
Moor Park	13.13 "	dep	19 "	
		(arr	$18\frac{1}{2}$ "	

Overall Average - Finchley Road-Moor Park 42.58 mph

/ subject to errors arising from calculation to nearest half-minute.

These figures though do not, in themselves, reveal the maximum speed attained, but a close approximation can be obtained by taking the time allowed for passing Harrow to the commencement of brake application for the Moor Park stop. Deducting 25 sec. and 0.17 mile, braking time and distance, the average speed for the 5.7 miles is approximately 45.1 mph.

As the section from Wembley Park to Harrow contains a long up-grade to Northwick Park as well as a permanent speed limit through the station at Harrow, it is unsuitable for consideration here; but the first section to Wembley Park from Finchley Road having an

up-grade towards Willesden Green and, generally, a compensating down-grade afterwards and towards Neasden, presents no major difficulties as regards operation and timing. Assuming the Wembley Park passing time to be 6m.30s. dead after start from Finchley Road, the balancing speed necessary to travel the 4.49 miles in that time works out at roughly $46\frac{1}{4}$ mph and accords well with the average given above.

It is understandable that signalling distances and other considerations may prohibit the use of appreciably higher speeds over the section between Finchley Road and Wembley, but, if the trains are capable of attaining a balancing speed of 60 mph, it does seem that some advantage could be taken of this over the section of nearly six miles between Harrow and Moor Park, which has recently been quadrupled in track and equipped for both slow and fast running in each direction.

TRAMWAY TUNNEL AT BLACKFRIARS

The existence of a tramway tunnel near Blackfriars has come to light recently. It appears that a Gasworks in the Blackfriars area was moved three times in its early history, and ended up in 1865 being split by the construction of the Thames Embankment. It was in this year that a special tunnel was built from the river bank into the Tudor Street area for conveying coal on a simple tramway from the small ships moored by the river bank into the Works.

This tunnel, which was situated some 30/40 yards west of Blackfriars Bridge and ran beneath the road but above the District Railway, had good use until 1873, when the Gasworks finally closed down - much to the relief of the City Corporation.

Part of the tunnel was then used by an hotel, which stood on the site of the present Unilever House, as a wine cellar. This part was completely demolished on the building of Unilever House, but the section under the Embankment was used up to just recently as a rifle range by the City of London School; this has now been destroyed to make room for the Blackfriars Underpass. Thus it seems that most, if not all, the tunnel has been erased from Underground London; it never had any connection with the District Railway, being merely a close subterranean neighbour to it, but these relics of the past can always add interest to a walk or ride through the City - if one knows about them in advance.

12th March 1964

Dear Sir,

I was surprised at some of the answers given by Alan Jackson and Desmond Croome in the Tube Lines Information Service. There has never been any secret that the 1960 Tube Stock was being converted to run from Woodford to Hainault in 1964. The Instruction Train has never been moved with a battery car on either end, although this is not impossible. The movement has always, up to now, been carried out by means of pilot motor cars made up of Pre-1938 Tube Stock.

London Transport,
Acton Works, Bollo Lane,
Acton, London, W.3.

Yours faithfully,

J.G. Bruce

(A.A. Jackson writes:- We are grateful for Mr Bruce's informed comment, but would point out that Q11 passed through our hands about six months ago, at which time LT official sources were not prepared to say specifically which stock would be used! As for Q15, we had meant to type "works car" but somehow "battery car" crept in instead.)

5.3.64

Dear Sir,

In the February issue of "Underground", Mr Brown praises the 24-hour system as a means of eliminating confusion. However, in the four years I spent in the R.A.F. (where all times were quoted on this system) I never quite got used to the times from 13.00 onwards, and for some peculiar reason the authorities took a dim view of my turning up for some duty at say 7.0 p.m., when the notice said I should have been there at 17.00 hours. The tendency was always to knock off 10 hours to get at a familiar time, instead of subtracting twelve hours.

In the same issue, the writer of the obituary on Mr Crump makes two assumptions in the last sentence. First that all L.U.R.S. members are sufficiently highbrow to read 'The Times', and secondly that they are all old enough to have been aware in 1937 of currently controversial matters. On both counts I fail, so could a future issue possibly include an article to inform members what the 'great Northern Line controversy of 1937' was about, and who was doing the arguing at the time.

Finally, on the subject of relics, would it be possible for the Society to keep an eye on the fate of the remaining Metropolitan Railway red triangle station nameboards, with an eventual bulk purchase of them as the aim. I expect the Society's own preservation scheme would take one pair of them; I would certainly buy another pair, and probably all those remaining would quickly find homes somewhere within our large membership. These last Met signs are, of course, those at Drayton Park and Finsbury Park on the G.N.& C. Presumably the only reason they have not been replaced by L.T. signs is the uncertainty as to the future of these stations.

67 Sussex Road,
North Harrow, Middlesex.

Yours faithfully,

P.Densham

Editor's Note See end of Letters to the Editor for a brief outline of the Northern Line controversy.

8th April 1964

Sir,

"The Underground Story"

If I may be permitted to comment on that part of the Rev. P. Boulding's letter (Underground Vol 3 No 3) not dealt with by Mr Major in No 4, I would like to make the following observations.

As regards location, the only underground junction open in 1863 was the original connection at Kings Cross, but the bell-mouths there were brick-lined - indeed a portion is still in situ. Of the 1868 connections only that at Baker Street was associated with broad gauge working, moreover this junction was straight and not arch-girdered and there was, and is, no access of light beyond, such as would be compatible with the identification of the site with Praed Street Junction, the source of light there being the glass roof of Edgware Road station. There seems little doubt therefore that the junction is correctly identified.

As to the extension of broad (or mixed) gauge rails to Praed Street, an official plan of October 1860, retraced in January 1899, in Mr Gates' time, shows both branches to have a formation width of 28'6" and all tracks to be of mixed gauge; however, another tracing, dated January 25th 1869, depicting the section between the point of bifurcation and Bouverie Street, including the short spur cutting now occupied by the substation, shows a width of 25'0" throughout; and this would be quite inadequate for broad gauge working.

The date quoted suggests that the plan was one approved as representing what was actually constructed. Insofar as it has proved possible, the 25'0" is confirmed by personal observation.

Col Yolland does not mention a signal cabin here in his inspection report of 16/12/1862, but Capt. Taylor specifically refers to this, among other cabins, on the Brompton extension, as having locking apparatus inferior to that of the original line, in his report of 1/10/1868. The inference is that if the points were laid at the junction in 1863 they were "slipped and scotched" and not worked. However, it seems very unlikely that they were put in at all at that time, and that the mixed gauge lines towards Bayswater were a figment of the artist's imagination, based, perhaps, on the 1860 drawings. It is to be observed that a lithograph of High Street Kensington was also drawn in this way, but before publication the broad gauge rails were deleted, leaving the trains, which are seen nearly end-on, with a decidedly lopsided appearance.

66 Hare Lane,
Claygate, Surrey

Yours faithfully,

K. Benest.

THE NORTHERN LINE CONTROVERSY OF 1937

(See correspondence above and Obituary on p.36 (March Issue).)

A summary of the Northern Line controversy appears on pp.250-251 of *Rails through the Clay*, and the full correspondence, in which Frank Pick represented the official point of view, can be read in *The Times* newspaper, issues covering the period from 16th March to 27th April 1937 inclusive. Norman Crump's letters are in the issues dated 15th and 23rd April, and his main point was that the New Works Programme electrifications and extensions would vastly increase the West End passengers, who would still all have to pass through the Camden Town junctions. He suggested that Camden Town-Charing Cross be quadrupled to deal with the extra traffic and that a flying junction would be necessary at Finchley Central. As the full Programme was never completed, we shall never know whether the LT plans were as inadequate as Crump suggested they were. In a sense the Victoria Line will give effective "quadrupling" south west of Euston, although of course the Northern is not carrying anything like the traffic it would have been had there been tube services to Elstree, Alexandra Palace and Edgware via Finchley Central, and no Green Belt.

Other points argued in this interesting battle of letters were that the Bushey extension was unnecessary and that fares in the northern suburbs should be standardised to help spread the traffic between the various lines - Met. and LMS as well as tube.

Anyone wishing to study the whole correspondence may see the files of The Times at the British Museum, Westminster Reference Library and other large libraries.

A.A.J.

NEWS FLASHES

NF 260 New Route Diagrams which appeared in Hammersmith and City and Circle Line trains during April 1964, refer in their titling to the Hammersmith & City by that name. The name has been little used of recent years, the service being treated as far as the public were concerned as part of the Metropolitan.

NF 261 Experiments are being undertaken in the fitting of a lighter square-ended shoe to the following cars: 5020/21; 5110/11; 53004-54004; 53243-54043; 10100-12068-11100; 10129-11129; 21120-23209. By observation, these appear to be about half the weight of the conventional shoe, and have a chamfer cut into the centre to facilitate "padding" them.

NF 262 Work appears to have started on the new station scheme at Tower Hill (see article in Underground for April, p-58). Two sites in the centre of Trinity Square have been fenced off, a hole about six feet square being situated in each.

NF 263 Ex-LT Locomotive was seen proceeding under its own steam between Wembley and Harrow-on-the-Hill on 20-3-1964.

NF 264 The Metropolitan main line coaching programme was completed on 13-12-1963, when the last train of A62 stock came into service.

NF 265 It is reported that Edgware station is to be completed, after about thirty years. This type of rumour has been heard many times before, however, but nothing has happened on these previous occasions.

NF 266 The restored Metropolitan Railway milk van No 3 was sent from Neasden LT Depot to the Museum of British Transport at Clapham on 18-1-1964. This was used as a Tool Van in the service fleet for many years, and was renovated and restored to original livery for the Centenary Celebrations.

NF 267 With the reconstruction of Elephant & Castle Northern Line station at surface level, the last of the original City and South London unrebuilt stations disappears. Kennington still has some features left, but has been much altered.

NF 268 Metropolitan A Class locomotive No 23 returned from Neasden to its home in the Museum at Clapham on 11-1-1964. This engine had also been in the Centenary Celebrations last year.

NF 269 Further to Mr S.E.Jones' letter in the April issue re the South Acton branch, it is now understood that, during the demolition of the bridge at South Acton station, one girder fell from the crane into the road and burst a water main, and so caused some flooding in the locality. The girder was in the road for only a short time - but while the bridge over Bollo Lane was being demolished on 22-1-1964, the whole bridge fell into the road which was blocked for several days as a result.

NF 270 Work will start shortly on a new waiting room and canopy for the eastbound platform at Hounslow East station - to replace the present wooden shelter.

NF 271 Special buses replaced trains between Hainault and Woodford, Central Line, on Saturday and Sunday 4/5-4-1964, while equipment for automatic train operation was being installed ready for the experimental automatic service.

NF 272 Stansted, Essex, has been proposed as London's third airport by an interdepartmental committee which considered more than 100 sites. Among the means of access proposed for the new port are a monorail, a spur from the Bishops Stortford - Braintree line of British Railways and use of the Victoria Line in conjunction with a coach service from a terminal in the north-east of London.

NF 273 The Bluebell Railway has purchased, for £750, the ex-LBSCR Terrier tank "Fenchurch" - built in 1872 for use in operating the East London Railway.

NF 274 Sir Percy Rugg, Leader of the Conservatives on the London County Council has suggested subsidies for London rail fares on the same principle as roads are subsidised. Sir Percy is to be congratulated on this move to combat ever-rising fares; at the same time he has provided another case of a more enlightened trend towards public transport, referred to in the editorial for April.

NF 275 The British Transport film "A Hundred Years Underground" has been chosen as the official British entry in the Euro-vision Grand Prix at Cannes this spring.

NF 276 A northbound Northern Line train was delayed for six minutes at Morden on 21-3-1964 due to illness of the guard.

NF 277 Sleet locomotive ESL 111, based on Parsons Green, was observed in the southbound platform of that station at 8.45 am on Thursday 5-3-1964.

P.R.Davis

On Sunday, 5th April 1964 commenced the London Transport Board's first full-scale exercise in automatic train operation, and the beginning of this, at present experimental, service between Woodford and Hainault seems an appropriate time to review the automatic operation of underground lines generally, and to give a brief outline of the steps taken by LT which have led up to the present fully automatic shuttle service on the Central Line.

Automatically operated trains are not completely new; in fact, they are running or have run experimentally in Paris, New York, Tokyo, Moscow, Stockholm and Barcelona as well as London - the first of these being a rubber-tired service on the Metro which was installed on the Metro in 1951/52, but not proceeded with at that time.

Various methods of control have been used on these trains, Paris using a continuous cable on alternate sides of the conductor rail, Barcelona a system of photo-electric cells, and Stockholm a portable computing machine, while New York, which has a shuttle service on the Times Square-Grand Central line complete with automatic reversal, has numerous methods of control in use simultaneously. Tokyo has developed a control system working on high frequencies, which has reduced stopping errors to a point where they can be measured in centimetres, and the Paris Metro are now going ahead with the automation of the Vincennes-Neuilly line under a programme due for completion in about twelve months.

In London, experiments were commenced at Ealing Common depot some time ago, two District Line cars being fitted with the special equipment - R49 stock driving motor car 22681 and non-driving motor car 23207 being the vehicles used - they having been taken out of normal service periodically from the middle of 1962 for preliminary tests.

The next stage was to make initial tests on a normal running road, and so experimental equipment was installed on the eastbound inner track from South Ealing to Acton Town, District Line. This stretch is about a mile in length, and a dummy station platform was erected in timber about 400 yds east of the bridge spanning Elderberry Road. It was erected to the north side of the eastbound inner road, and served for experiments in automatic stopping of the train.

These experiments were very successful, and as a result the experiments received their first really official publicity when a press demonstration was held on the 21st of March 1963, which took place on the section mentioned above, with a bogie waggon stationed for the press, complete with a brake van for shelter if it rained, on the adjoining inner westbound road.

This particular stretch of track is peculiarly suitable for experiments of this nature; there are four tracks, of which the District use the outer and Piccadilly Line trains run on the inner pair during rush hours, but out of peak times, the Piccadilly use the outer tracks as the District trains only run at peaks - thus leaving the inner tracks free of normal traffic during the middle of the day. So it was quite natural for this section to be used to experiment and demonstrate - the dummy station set up, having ramps for platform ends and the water spraying piping between the ramps being painted white and furnished with five boards bearing the legend "station", likewise did not interfere with normal service operations.

By this time the automatic train being used was an eight-car unit, details being as follows - starting from the western end:-

- 22681 - R49 driving motor - carrying automatic equipment
- 23579 - R49 non-driving motor - also, carrying automatic equipment
- 22617 - R38 driving motor
- 23546 - R47 non-driving motor
- 23430 - R47 non-driving motor
- 23307 - R47 non-driving motor
- 23207 - R47 non-driving motor
- 21130 - R38 driving motor

It will be seen that this is a normal six-car unit with the two specially fitted cars attached at the western end to make a full-length (eight-car) train.

The demonstration runs received quite a lot of publicity in the press, and interest among the general public was considerable; a leading question for the traveller was whether any crew would be carried on the trains when automatic operation became the norm on the Underground. This is a point on which I/T have expressed their views very clearly all along.

It is not the intention of the Board to run unmanned trains at all on busy sections of route, as it is felt that safety requirements in the event of anything untoward happening do make it essential to carry one member of staff on each of the trains - though it would be quite possible to operate a service with unmanned trains. Accordingly, each train will be staffed by a new grade of operating staff, who will be known as the Train Operator. This man will travel in the motorman's cab, from where he operates the train doors at the stations; when these are closed after a station stop, he must then close the cab window and operate starting buttons before the automatic equipment can move the train away from the platform. It is also possible for the operator to switch to manual control in an emergency. Thus any passenger who has felt doubtful of the wisdom of entrusting himself to the tender mercies of an automatic train may rest assured that his journey is still being personally supervised by someone on the spot - and to press the point home, it is intended to instal equipment in the automatic trains which will allow staff to communicate with the passengers on the train.

From a series of successful tests on running lines, the next logical step was clearly to commence tests in actual service conditions. The trackside equipment was therefore moved to the section from Stamford Brook to Ravenscourt Park, where it was installed on the eastbound slow track. Tests were carried out with the train over the weekend of 6th/7th April 1963, following which the Ministry of Transport gave its approval to the use of the train in passenger service.

Use by the public started immediately, on Monday 8th April, when the automatic train, running as train 123, was run automatically between Stamford Brook and Ravenscourt Park in the course of its journey from Ealing Common to Uxminster. The train continued to work as Train 123 on weekdays, but as No.110 on Saturdays and No.73 on Sundays.

It will thus be seen that the train can be worked as an ordinary, manually controlled, train without any difficulty - in fact, merely by switching to manual in the operator's cab.

From the passenger's point of view, there is little to choose between the two methods of operation, except that on automatic control a smoother ride should be experienced. In the experimental train, of course, the equipment is spread out in the two fitted cars deliberately, to facilitate its inspection and adjustment - but this is only for this stage.

SOCIETY NOTICES

Photographs Will those members who walked through the old City and South London tunnels on the Society's visit on 11th April, and who took photographs while doing so, please write to the Editor at 62 Billet Lane, Hornchurch, Essex if they have negatives they are willing to lend towards the making up of a set to be offered to members.

Cartography As announced last month, David D.Higgins, of 72 Street Lane, Roundhay, Leeds, 8, Yorkshire, has been appointed Cartographer to the Society. To enable him to make a really concrete contribution to the Society's researches he will need assistance from other members. David would, therefore, like to hear from the following:-

1. Those who have maps, plans, diagrams, etc. A list is asked for, giving dates, where known, also any special facts.
2. Those who have photographs, in negative or print form, showing track layouts clearly; a list is not needed at this stage, but if prints can be spared they will be very welcome.
3. Anyone who is prepared to assist with fieldwork - together with a note of the time they can spare.
4. Competent photographers willing to record the present situation.
5. Those prepared to conduct research work at Libraries and Record Offices.
6. Anyone disposing of cartographic material is asked to communicate with David first, so that he may record what he needs before the items are parted with - of course, the Society is always prepared to accept such items for the Library in any case!

THE TIMETABLE

Saturday 23rd May (subject to confirmation by British Railways) Visit to Spitalfields Sidings and Hoist, etc. Names to M.T.Connell, 5 Trenchard Street, Greenwich, London, S.E.10.

Friday 29th May 7 p.m. Slide Show from Members' Collections, in the Meeting Room, Kensington Central Library, Campden Hill Road. The success of this evening depends on you - so bring your slides, even if you have only one or two (and we will show them for you if you are too shy!).

Friday 12th June Modellers' Evening with Joe Brook Smith in charge; details next month.

Saturday 13th June Visit to Hainault Depot. Names to the Secretary at 4 Southcombe Street, London, W.14.

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