



UNDERGROUND NEWS

No 160

April 1975

THE TIMETABLE

Friday 11th April. A talk entitled 'LT's Internal Transport' will be given by Mr B D Constable from the LT Central Distribution Services. Hammersmith Town Hall, 19.00 for 19.15.

Thursday 17 April. 'CAMDEN'S LOST RAILWAYS' - an illustrated lecture entitled the 'Pneumatic Despatch Tubes' will be given by our past President Charles E Lee to the Camden History Society who have kindly invited our members. The lecture will be held at the Working Men's College, Crowndale Road, N W 1 (near Mornington Crescent station). This meeting which promises to be extremely interesting commences at 19.30.

Friday 9th May. Talk entitled 'Operating Aspects of Staff Shortage' will be given by our member Piers Connor. This talk will not only be interesting but highly topical in view of LT's recent difficulties. Hammersmith Town Hall, 19.00 for 19.15.

Saturday 24th May. A morning visit has been arranged to Drayton Park depot. Names accompanied by a first class see should be sent to S E Jones, 113 Wandle Road, Morden, Surrey.

URGENT

Saturday 26th April. Visit to Ruislip depot. Names to S E Jones as above, as soon as possible please.

Hammersmith Town Hall is situated in Nigel Playfair Avenue, Hammersmith. The nearest Underground station is Ravenscourt Park not Hammersmith.

MOORGATE

All readers will be aware that during the morning rush hour on 28th February 1975, 40 passengers and the driver were killed and a further 70 or so of the remaining passengers injured, many of them very seriously, during the accident at Moorgate on the Highbury Branch of the Northern Line and in the immediate vicinity of platform 9. It is the worst accident ever to have occurred on a railway train (or bus) under the auspices of London Transport or its innumerable predecessors; it is also believed to be the only noteworthy incident to have occurred on the Northern City Line, although it should be recorded that some people believe that a similar 'over-run' did take place at the same spot in 1924 (fortunately without serious consequences).

The occurrence took place at 0846, and the train involved was number 272 0837 (ex Drayton Park) comprising 11175-012263-10175x11115-012167-10115. The train entered platform 9 at speed and failed to stop: it demolished the stop lamp, destroyed the sand-drag and buffers as it continued into the over-run tunnel which is a mere 80 feet or so long. After the ensuing catastrophic collision about two and a half cars were compressed into this short space, the leading two cars being largely destroyed and the third severely damaged, the rear unit was comparatively little damaged. Not surprisingly most of the deaths and serious injuries took place inside the wreckage of 11175 and 012263 and the majority of the lesser injuries (such as broken limbs) occurred throughout the remainder of the train as passengers waiting to alight were projected at speed against the internal structures of the rapidly decelerating cars. The train was motoring virtually up until the moment of impact and is thought to have been travelling at about 35mph.

Several persons gave evidence regarding the train at the official enquiry; Mr McManus (Depot Engineer, Neasden) carried out certain brake tests, and had been informed of the brake cylinder pressures as ascertained from the rear unit at about 1015 on the day of collision.

Mr Savin (Asst. Divisional Manager Northern & Victoria Lines) arranged some tests following the collision. The results of these tests indicated that the pressures that Mr McManus quoted were consistent with there having been a full Westinghouse Brake application at about the time of collision i.e. at the time of collision there was enough air in the brake system to have stopped the train. Mr Hafter (Rolling Stock Engineer, Railways) reported that he had found NO physical evidence of heavy braking on the rails. He had found the master controller in the series position with the Deadman's Handle up; the motorman's right hand was not on the controls, but his left hand was on the brake controller. He also reported that the reverser key was in Forward 1 and the driver's brake valve isolating cock correctly open. Cab switches seemed to be in the correct positions and the cab light was off. Mr Lowe (Mechanical Engineer, Design) reported that he had had all the braking equipment removed from the damaged train and examined. All the valves were found to be completely operative- he had even had them fitted to another train and they worked perfectly. He thought that the brake controller had been working at the time of collision and was in the off and release position, furthermore the master controller appeared to be fully operative at the time of impact. No attempt seems to have been made to apply reverse power. Mr Lowe reported that the camshaft mechanism on 11175 was found jammed between positions two and three, since it was later established that the mechanism took 2.3 seconds to run back from position ten to one, all the indications are that the train ceased motoring about two seconds before impact. The camshaft normally notches up from one to ten (full series) and then notches back down to one (full parallel), when the

train normally ceases motoring the camshaft either remains at one or (if in full series) quickly returns to one. In view of the speed involved the train was quite clearly not running just in full series and the most likely explanation is that the motorman accelerated to full parallel and then put his controller into series (the position in which it was found). The train would have continued in full parallel until the current rail gap at the Moorgate crossover when the camshaft would have moved to series. The camshaft was probably moving back due to loss of power under the car, or because the train was tripped on the sand-drag. The tripcock was actually found reset, but in all probability this occurred when the car body and the bogie parted company (thus operating the tripcock reset cord). Mr Lowe further reported that the control governor was fully operative, and all the triple valves were found in the emergency position.

There seems to be little doubt that the train was functioning quite normally when the collision took place, and motored solidly from the time it left Old Street until the time it ran out of railway. No attempt was made to stop it during that time.

The train had a compliment of two staff, the motorman and the guard; much evidence has been given regarding the 'state' of the motorman prior to the incident and it transpires that he was a happy, conscientious worker who tended to go by the book. When the collision occurred he had over £300 on him to buy his daughter a car. Some people gave evidence about the seconds before the incident itself and most platform observers reported that they thought the driver had a 'glazed, fixed expression and was looking straight ahead'. The value of remarks such as this is, to say the least, doubtful since most normal motormen appear like this whilst driving, the train was travelling at some speed through a poorly-lit platform and the cab light was off. A full autopsy was performed on the motorman's body; however this failed to reveal anything which may have caused him to lose consciousness or control - by all accounts he ought to have been in perfect health. The motorman worked with two colleagues that morning (because the guard was late booking on) and both reported that he was in good spirits and quite cheerful.

One of the reasons the guard did not stop the train was because he was reading the advertisements half way down the car. This caused a considerable stir in the evening press on the first day of the enquiry, but unfortunately it is not uncommon for guards to leave their positions before termini so that they may alter the rear destination, switch off tail lights, and put on headlights. All these actions are against regulations. In this case the guard alleges that he 'went to get a newspaper from the rear cab'. The guard is not supposed to leave his position except in emergencies and a quite uncompromising rule requires the guard to apply the emergency brake if it appears that the driver will fail to stop the train in the station. The guard claims he did not have time, however had he been at his position (where there was a brake handle) and paying attention he could not have failed to notice the crossover; he would then have known something was very wrong since it has a 15 mph speed limit over it and it is only a few yards from the end of the platform. Were he to have reacted, the collision would have been enormously reduced in magnitude.

As people have not been slow to point out, at stations such as Moorgate the ultimate safety device is the motorman; it is really the only accident that is left to happen since all other catastrophic possibilities have been put into the hands of (ultimately) the tripcock. It would be incorrect to say that similar accidents have not occurred in the past because they have. In 1946 a 1938 stock train crashed through the buffers at Edgware. The reason for this was subsequently found to be due to the motorman having collapsed, and the deadman's

handle cut out with the reverser key, which was off (fortunately the train was empty). In the Moorgate collision the handle was operative (the reverser key being in position forward 1) but again, Edgware shows that for the last few hundred yards AT NEARLY EVERY RAILWAY THROUGHOUT THE COUNTRY, we are largely dependent on the driver. Unfortunately a few motormen do centre their reverser keys when they have finished motoring upon approaching a station - one newspaper reported a motorman as having said 'well, it's quite an effort to keep holding this handle down'. Motormen who do centre their keys whilst the train is moving (which cuts out the deadman's handle) do of course break the rules, but when something does happen it will be of little consolation to know this since most railway accidents occur as a result of someone breaking the rules.

It is of interest to observe that in 1939 London Transport filed a patent (pat no 533080) for a device to assist train control. It consisted of a trainstop provided on the approach to a signal or obstruction and would have been fitted on the left of the line, operating a special tripcock on the train. The principle behind its operation was that the motorman (on approaching the signal) would slow the train down and operate a plunger, which would neutralize the effect of this extra tripcock. If no attempt to operate this plunger was made then the train would be tripped before the signal was reached; if the plunger was operated but the train continued then the train would be stopped at the normal trainstop. The function of this device was to keep motormen alert, and stop offenders before the danger signal was passed, no action would be necessary if the signal was clear - the device is similar in many ways to the BR AWS system. If this device or something similar was fitted to signals and at all termini then neither the Moorgate accident, the Edgware collision or either of the two Tooting collisions would have occurred. Unless something is done, a similar accident may well occur again.

A resolution was passed at the recent AGM that the society should send a donation to those involved in the disaster. A collection was made and any other members who wish to contribute should send their donation to the Secretary, 113 Wandle Road, Morden, Surrey. Acknowledgements will be sent if a stamped, addressed envelope is enclosed.

NEW RAILWAY TIMETABLES

At last, we all say to ourselves, the 'proper' services have been restored! From 1st April the full Monday to Friday services were run again - almost. New Working Timetables were introduced on all lines and these consisted of the same basic service run prior to June 1973 when the services were cut. One interesting feature of the Metropolitan service is that all trains will stop at Harrow. Hitherto (apart from the emergency service) fast Amersham, Watford and Uxbridge trains have not called at Harrow during the peak hours - an age-old tradition. This may mean that Metropolitan will never again run through platform one. On the Northern Line, which is the only line to re-use its old timetable, four trains will remain cancelled during the peak hours, due to a rolling stock shortage.

From 1st April the following timetables will be in use.

<u>Line</u>	<u>Mon-Fri</u>	<u>Sat</u>	<u>Sun</u>
Hammersmith & City	248	E235	235
Metropolitan	250	E237	237
Bakerloo	66	E61	E61
Central	36	35	37
District	100	97	99
East London	A242	B242	A242
Northern (Highbury)	A27 128	28 128	29/A27(same service) 128
Piccadilly	6	3	5
Victoria	10	9	A8

The next move is awaited with interest.

At the risk of causing confusion, I wish to make absolutely clear the position regarding the emergency timetables mentioned in Underground News 157. It seems that all lines had been issued with emergency timetables (that is special timetables bearing the normal number and suffixed E). These showed a 15% service reduction. When they were reprinted, the numbers were amended to accord with the current Working Timetable, and after 1972 the E suffix was dropped and a B prefix was used instead. These emergency timetables were not necessarily printed whenever a new Working Timetable was produced. At some, probably later, stage the contingency timetable giving a 7½% reduced service was prepared. It is not known whether it carried a number, or what it may have been, but during 1972 it obtained the C suffix and was given the current Working Timetable number. A further difference between the B schedule and the C schedule was that the former gave a 15% reduction all day, whilst initially the latter gave a 7½% reduction during the Monday - Friday peaks.

With reference to line 4 on page 6 of Underground News 157, the figure of 20% is arrived at by calculation of the number of trains - this probably varies between lines - the actual service reduction should be nearer 15%.

CHARING CROSS? - EMBANKMENT?

It is arguable whether Charing Cross has truly been renamed Charing Cross - Embankment since it is written as Charing Cross almost everywhere apart from the bullseye station name-boards at that station. The poster regarding the matter of the renaming and the Christmas Holiday leaflet and associated timetables (from which the leaflet was made) are notable exceptions.

Once more however London Transport have been surprisingly consistent in their inconsistencies and references in recent District Line timetables reflect this. Timetable 98 (dated November 1974) refers to Charing Cross as Embankment in various places inside. Timetable 99 (dated March 1975) refers

to Charing Cross - Embankment whilst Timetable 100 (dated February 1975) refers to Embankment once more. Timetables printed well after the renaming (apart from the above) still persist in using Charing Cross.

LETTERS

The Editor
Underground News

Sir

The new ticket office at Wells Terrace, Finsbury Park is certainly convenient for passengers entering the station from that place, but most inconvenient for those coming from Seven Sisters, which is of course the main road.

People from that entrance are obliged to walk the entire length of the subway to Wells Terrace, a distance according to the latest large scale Ordnance map of about 200 metres, buy a ticket, retrace their steps half way, 100 metres, turn left, another 50 metres and eventually reach the platform, a total walk of 350 metres.

For nearly 70 years ticket offices at the head of the staircases were convenient and most satisfactory; they are still in place and should, I submit be reopened. The present arrangements simply encourage people to travel without tickets. I find it quite impossible to understand why LT went to the expense of constructing an office at Wells Terrace.

167 Cornwall Road
Ruislip

H.V.Borley

2 March 1975

The Editor
Underground News

Sir

I was very interested in the details of services on Christmas Day given in your issue dated March 1975.

Until about 1946 the full Sunday service had been run on that day and the only stations closed were the two or three normally closed on Sunday at that time.

The main railway companies also ran full Sunday services, frequently with some additional trains in the morning.

167 Cornwall Road
Ruislip

H.V.Borley

2 March 1975

INCIDENT ON THE EAST LONDON LINE 17th DECEMBER 1974

At about 06.02 train number 172 was departing from New Cross depot and went past a shunting signal set at danger; the train was derailed on the catch points immediately beyond, at the exit from the depot. The train carried on and damaged current rails and sleepers finally coming to rest on the main line with part of the front car resting against the overbridge EL 44 and with six bogies off the track. The train involved consisted of cars 10106-012169-12094-11106, and its unfortunate course automatically caused the traction current to be discharged, indicating to the motorman of train 173 (05.59 ex New Cross, presumably a little late) that something was wrong. He was able to stop short of the derailed train, preventing what might have been a serious collision; the passengers of train 173 were later detrained to New Cross depot.

Following this incident, trains 171 and 174 were left to operate the Shoreditch to New Cross Gate service, train 174 later being reformed to 172. Since the only East London Line depot was now blocked, a train was requested from Neasden depot, but all that was available was a seven car Bakerloo Line train and this was dispatched to Whitechapel (SB platform) via St. Mary's curve and New Cross Gate (empty) and arrived late in the morning. The train was an EHO 1938 stock and comprised 10155-012247-11155 x 10214-012295-12014-11214.

It was intended to place this seven car train into service at 14.53 as train 173, even though six cars can be a very tight fit into some stations. However, due to an uncovered duty at Barking depot which should have worked train 172 from Whitechapel at 14.43, train 172 was reformed into 173 upon its arrival at Whitechapel leaving the seven car train still stabled; it was still there when the Shoreditch service was due to commence, but since its static presence precluded this, trains 171 and 173 still had to reverse at Whitechapel (in the NB platform). At about 16.10 the seven car train commenced running in the path of 172, although it carried the number 170, to New Cross Gate and back in passenger service and this allowed the Shoreditch service to start, although in fact, it was further delayed.

At about 17.15 the New Cross branch was officially declared clear, and train 175 departed from the depot at 17.20 and initiated the Shoreditch service. About five minutes later the seven car train (170) left Whitechapel for Surrey Docks and thence to the depot (empty). By 17.45, four out of the five scheduled trains were running in their booked paths.

The seven car Bakerloo train returned to Neasden Depot on the following day, and the damaged unit on the 21st December.

CORRECTION

Underground News No 159 page 32. The asterisks after 'Circle Line', '12' and '15' MUST BE DELETED. New asterisks should be placed in the Circle Line row after 20 (in 1964), 20 (in 1969) and 30 (in 1973). The incorrect positioning of the asterisks is regretted and is due to inadequate proof reading.

The circle service ran completely until 14.00 (when replaced by a shuttle) until 1973 when the shuttle only ran.

ON THE LONDON ROAD

The first 'Yerkes tube' to open, the Baker Street & Waterloo Railway, did so in 1906 and existed in splendid isolation, with no links to any other railway line at all. This isolation posed some awkward problems for the London and North Western Railway Company, which was responsible for transporting the new tube's rolling stock from the assembly plant in Manchester to the BS&WR's depot in London Road, Southwark.

The cars were manufactured by the American Car Coy, but were shipped to Britain in sections for final assembly in Manchester. They were all steel and weighed 23 tons complete and were just over 50ft long. The LNWR marshalled the cars into 12-car rakes as they were completed, and they were despatched for London approximately fortnightly, being hauled by 6-coupled Goods locomotives to Camden Goods station.

Following their arrival at Camden, the cars were stored until ready for removal to London Road, approximately one car each day being taken from its bogies and transferred onto two lorry units for transporting during that night. One of the lorry units was converted for use underneath the cars, but the other one had to be specially constructed. The cars were transferred from their bogies to the lorry units by 20-ton cranes fitted with specially cushioned slings to prevent damage to the paintwork which, incidentally, consisted of a brilliant red bodyside with creamy-yellow upper panels, all lettering, including the words 'Baker Street & Waterloo' being gold coloured.

During the night, the car's difficult journey across London would commence, generally at about midnight.

The lorries carrying their heavy load (for even without bogies the motor cars weighed 14 tons and trailers 13 tons) would be hauled out of the depot by a team of 14 horses. The load would then proceed through Camden Town, down Albany Street, then past Portland Road station, along Euston Road, Grays Inn Road, Holborn, St Brides Street, Ludgate Circus, New Bridge Street, across Blackfriars Bridge, St Georges Circus and London Road. The journey time was just under two hours. The utmost co-operation was maintained between the hauliers and the LCC during the time the latter's tramlines were obstructed for several special arrangements had to be made. Upon their arrival at London Road, the tramlines were cleared within about ten minutes although it then took a considerable time to negotiate the entrance and lower the cars down the ramp into the depot. To enter the depot, the cars had to be turned through nearly a right-angle in a road only 43ft 4in wide, then almost immediately sent down a steep slope.

The bogies were sent in advance, and upon their arrival were prepared for the refitting of the car body. When the long, perilous journey down the depot ramp was complete, the cars were finally hoisted onto their waiting bogies and left in the hands of their new owners who prepared them for service and stored them until the line was ready to be opened.

MORE COMMENT

With reference to COMMENT (UN 158 pages 21 & 22), another car has been observed with advertisements positioned upside down; the car was No 3358 and was running on the Northern Line. Not one, but two, Round London Sightseeing Tour advertisements were at fault - and they were in illuminated advertisement frames. There were five other Tour advertisements in the same car, however London Transport appear to have successfully negotiated the difficulties involved in positioning these the correct way up.

NEWSFLASHES

NF 1462 Southbound Passengers at Golders Green were delayed at about 11.00 on 25th February, the angry people were eventually advised to continue their journey by bus. Some of the people originally on a city train in platform 5 had been asked to change trains no less than four times before the two southbound trains were cleared. London Transport attributed the event to a "Track" failure.

NF 1463 Temple station is shortly to be modernized and severely redecorated along the lines of Cannon Street. To enable the work to be completed as quickly as possible the station is to be closed throughout this period on most Saturdays; the station is already shut on Sundays. Major works are expected to commence in June, although some work is starting immediately.

Events on the 26th February marked the beginning of an unfortunate period for London Transport.

NF 1464 At about 04.00 the Whitely depository situated by the West Cromwell Road was observed to be alight (This is the building shown in many pictures of Lillie Bridge depot). The fire was quickly out of control and traction supplies on nearby LT lines were switched off between Earls Court and Barons Court. Current was restored on passenger lines and (despite reports to the contrary) it is not thought LT services were affected, although firefighting MAY have taken place from either the Olympia line or the depot approach line.

NF 1465 Later on at Barons Court, immediately after the shooting of PC Tibble, the wrath of the Metropolitan Police descended upon Piccadilly Line train 256 which happened to be in the Eastbound platform at the time; they apparently thought that the fugitive had boarded this train, however a search revealed nothing. This occurred at 14.12 and the train was delayed 6 minutes. In the event the fugitive had not transgressed upon the railway but had entered Barons Keep, a large block of flats on the other side of the road.

NF 1466 Still later, a report was received that a suspicious person had been seen on the railway line near Barons Court. Again the Police descended and at their request (at 15.59) the traction supply between Barons Court and South Kensington was removed. The result of this second futile search was that

- 10 trains were cancelled ex Northfields Depot
- 4 trains were cancelled ex Cockfosters Depot
- 3 trains reversed East to West at Acton Town
- 2 trains reversed East to West at Hammersmith
- 4 trains reversed West to East at Hyde Park Corner
- 1 train reversed West to East at Covent Garden

The train service was resumed as soon as the current was turned on at just after 16.30.

NF 1467 At 19.46 a track circuit at Lambeth North failed and this caused some delay although rectified in only quarter of an hour. As a result one SB train reversed at Piccadilly Circus and one train was taken out of service.

NF 1468 At 20.58 all power was lost to and from Greenwich Generating Station (Again!); this affected all lines except the Piccadilly. Furthermore a power surge caused some damage to various static equipment, and among other items some signal mains failed. Delays on all the affected lines were this time only in the order of half an hour, but surprisingly the Victoria Line was affected on this occasion although it was only delayed about a quarter of an hour. Supplies to Aldgate were resumed at about 21.07 and the Greenwich link at about 21.13. Normal supplies had all been resumed by about 21.40 although notices were being displayed at some stations announcing 'restricted services' until last train times. The fault was thought to be in the remote control link cables between Lots Road and Greenwich Power Stations. A similar fault occurred in 1973 although with more serious results.

NF 1469 On the 28th February the Ealing Common Breakdown Team (which was in attendance at Moorgate) was dispatched to High Barnet to deal with an incident involving a Northern Line train which had overshot a siding there in foggy conditions. Damage caused at that site was relatively small however.

NF 1470 It is reported that steam crane C603 is to be re-boilered in the near future. This is the 30 ton Permanent Way crane and consideration had been given to conversion to diesel-electric operation or replacement by an ex BR device.

NF 1471 A tall radio mast is to be erected adjacent to Park Junction signal-box at Highgate by LT, to aid communications over the whole of the London area to and from their Breakdown vehicles. The site was chosen because of its height, and its proximity to tube tunnels (to carry the cable for it). Its proposed erection was the subject of a small photographic display in Highgate Booking-Hall throughout most of February and March. Five photographs of the area were shown with the mast superimposed into the picture; due to the excellence of this operation, even an 'expert' would find considerable difficulty in believing that the mast was not in position when the photograph was taken.

NF 1472 The first train of 1973 tube stock, 101-501-301 x 300-500-100, made its first test run outside Ruislip Depot during the afternoon of 18th February. The journey consisted of a round trip to White City, where a lighthearted ceremonial bottle of Baby Cham was broken over the buffer of 101 by test motorman George Christie. On the following morning it was transferred to Acton Works, and after weighing cars 101 and 300, left for Northfields.

NF 1473 Car 2188D was noted at Acton Town on 17-2-75 with a strip of what looked like lead fingers, across the roof, exactly half way along the car. The fingers were about 2 inches long, and looked as if they once stood upright, but when seen were bent at various angles.

NF 1474 The following ex-Piccadilly Line train of 1938 TS left Ruislip depot for scrapping on 18-2-75;
12009, 012505, 10030, 11021, 012496, 10027, 11030.

NF 1475 East London Line unit 10136-012224-12003-11136 returned to Neasden after heavy overhaul on 14-2-75. It was transferred to New Cross and entered service on 19-2-75. ELL unit 10084-012217-12090-11084 is the next unit to be sent to Acton for HO.

NF 1476 C69 stock car No. 5519 has been running for some time with experimental moquette fitted to the two double longitudinal seats fitted immediately behind the cab. It is patterned in a series of horizontal red, blue, green, mauve and black stripes and looks particularly awful.

NF 1477 The very unusual station facade at Harrow (Met) Station has been heavily modified with the removal of the LT 'Underground' bullseye and the BR totem. These have been replaced by an inaccurate Roundel and the BR double arrow logo. The canopy has also received attention but (with reference to our Greenford NF) the authorities have seen fit to use the words BRITISH RAIL.

NF 1478 Another new subway has appeared at Baker Street Station; it connects the NB line to the SB (Stanmore branch) line. At the NB line end, some hitherto disused passages which were part of the old lift complex entrances have been reopened and connected to a new subway leading to the NB Fleet Line platform. At right angles to this (i.e. before you reach the new platform) the passage diverges to the right and down some steps. Passengers will find they emerge through the opening formerly connected to the NB escalator concourse (this passageway was permanently sealed off when the escalators closed for reconstruction). It is thought that the passageway came into use on Sunday 16th March.

NF 1479 New "improved" lighting has been installed at Paddington (circle) in connexion with closed circuit television installations. The lighting is of the sodium type and looks - remarkable!

NF 1480 The LT (Northern Line) booking hall at Moorgate will close for reconstruction on and from 5th April. Passengers for the Northern Line must obtain their tickets from the Metropolitan Line booking hall where additional booking facilities are being provided.

NF 1481 New types of station fares' lists have been provided since the recent fares increase. Slightly smaller than hitherto, they also omit the quarterly season ticket rate column which has not been used for some time anyway. Cheap day return fares (which are available for all journeys where the single fare is 20p or more) are also indicated.

NF 1482 The Bond Street umbrella was successfully removed over the Easter Holiday. The station (and the relevant sections of Oxford Street and adjoining streets) were closed after traffic on Thursday night and re-opened early on Tuesday morning.

NF 1483 Several Metropolitan Line station car parks are providing free parking (on an experimental basis). The stations are Hillingdon, Ickenham, Ruislip and Eastcote.

NF 1484 The 1973 tube stock has been constructed $\frac{1}{2}$ inch too high, thus being out of loading gauge; the error was not discovered until the first cars arrived at Ruislip Depot. After cautious test runs it has been decided that it will be necessary to lower the track at numerous Piccadilly Line sites to enable the trains to run in safety. It is believed that the problems tend to arise on curves where the error becomes more critical. The cost of altering the trains to fit the loading gauge is known to be too high, however it seems that the last cars will be constructed to the correct dimensions, It is not known how the error arose.

NF 1485 The train recording 'clocks' at Piccadilly Circus have been out of commission for some time now.

NF 1486 LT appear to have been caught unprepared on Good Friday regarding the weather. Train services on several lines were hit (though it has not been ascertained exactly why); the following notice appeared at Oxford Circus station, 'Due to adverse weather conditions, extended intervals are occurring at the east end of the District Line. On the Piccadilly Line, passengers for Hounslow West are advised to change at Acton Town!'

NF 1487 L14A & B (forming the articulated unit) were cut up at Acton during, it is thought, January or February.

NF 1488 The 1963 Underground Centenary Plaque was observed to be missing from its site outside Baker Street station on Sunday 30th March. It is not known when or for what reason it was removed.

RADIO COMMUNICATION UNDERGROUND

At Moorgate firemen used for the first time a new experimental radio, code named Figaro. This has been developed by Plessey to overcome the problem of communicating with firemen in burning buildings, tunnels or ships. In these cases a walkie-talkie operating on the UHF or VHF frequencies is useless because of the shielding effect of the smoke and the metal parts, in the case of tunnels, ships and steel structured buildings. Formerly firemen had to trail yards of telephone wire if they wanted to communicate.

Figaro has only been available to the Fire Brigade for two months and when it was taken to Moorgate it was uncertain whether it would work at all. The radio works on a frequency of about 3 Megahertz which happens to be able to penetrate metal framed structures. The amazing thing is that nobody knows why this frequency works. At higher frequencies the aerial would need to be too long and at lower frequencies the shielding effect greatly reduces transmission efficiency. Apparently there has to be some metal around to 'boost' the signal. The fireman carrying Figaro wears a special sleeveless jerkin into which is sewn a loop aerial. He carries the 5 pound radio in a pouch on his chest. An earpiece and throat-microphone mean that his hands are completely free.

At Moorgate, Figaro was used to establish communications between the rescuers on the platform, in the wreckage and with the back up services on the surface; to call down stretcher parties, new oxygen cylinders and so on. The Fire Brigade were delighted with its performance.

The radio could also prove to be an extremely useful asset to London Transport engineers giving them a very flexible communications system, when working in the tunnels, thus solving many of the difficulties they have at present.

The following LT vehicles were in attendance at the Moorgate accident:

1280 LD	Rolling Stock Dept.
1282 F	" " "
1273 LD	Permenant Way Dept.
1274 LD	" " "
1275 LD	" " "
1369 LR	Signal Dept.
1886 F	Catering Manager
1357 F ₃	Central Distribution Services
AIW 642D	Large Leyland vehicle
3 central bus division cars	

The following non LT vehicles were also there:

8	Pumps
5	Pump escapes
3	Salvage Corps vehicles
1	Rescue vehicle
1	Fire control vehicle
about 6	Fire cars
1	Fire minibus
1	Ambulance bus

Numerous police vehicles and ambulances were present.

SOCIETY NEWS

Following the elections at the AGM last month, we are pleased to announce that Sir John Betjeman is now our President. Our new Vice-President is John R Day who has been a good friend to our society for many years now. He is also the LT chief at Syon Park. Thanks must go to our retiring President, Harry Paar. Harry has been of considerable help over the years and has recently led a study tour of the eastern Central Line; another study tour will be held this year.

The Committee now consists of the following people:

P R Davis	T A Haynes
S E Jones	M A C Horne
P R Connor	G Jasieniecki
D F Croome	A B Nicholes
R J Greenaway	

AMENDMENTS TO SALES LIST

New items

Duster with Met Loco No 23 design.	25p
Story of London's Underground - revised, hardback edition.	£1.50p
London Transport at War 1939-45.	£2.50p
The Routemaster Bus - pub: Oakwood.	90p
London Trolleybus Pictorial.	60p
Wheels of London.	£9.50p

Price increases

K 424 Wall Plaque.	70p
LUT trolleybus wall plaque.	55p
E 1 tram wall plaque.	55p
Met Rly No 23 wall plaque.	55p
Dusters - B5015, E1 tram, RT1.	25p each
Ashtrays - K424, LUT trolleybus No 1, Met Rly No 23, Met electric loco, E1 tram.	35p each

(Shillibeer's horse bus still 33p while stocks last).

All the above are available from 21 Chestnut Grove, South Ealing, London W5

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Experimental AFC tickets of all types, old monthly, quarterly season tickets and special tickets Also AFC platform tickets, privilege, cheap day etc. If you are willing to part with (or lend for examination) any of the above, please contact the Editor (address as on page 39).

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UNDERGROUND

The next issue will be sent out with Underground News No 161.