

# UNDERGROUND ITEMS FROM THE TELEVISION AN OCCASIONAL SERIES

by Paul Raven-Hill

## “SECRETS OF THE LONDON UNDERGROUND”

Series 3 – Yesterday Channel

This is the third series (this comprising 10-parts), presented by Tim Dunn and Siddy Holloway, who visit parts of the London Underground that are off-limits to the general public, see how the modern Underground functions, while at the LT Museum’s Acton Depot, they look at various railway vehicles and root through the archives, unveiling documents, photographs, films, and artefacts that may have never been seen before. The first episode was broadcast on Tuesday 4 July 2023 at 20.00, with repeats on Friday and Sunday evenings, as well as one hour later on Yesterday+1.

### EPISODE 1

#### Camden Town and Sloane Square

The labyrinthine depths of Camden Town station date from 1907, when the then Charing Cross Euston & Hampstead Railway was constructed, later becoming part of the Morden-Edgware and the current Northern Line, and designed by the famous architect Leslie Green, with its characteristic ox-blood red external tiling. The station is also the junction for the Golders Green/Edgware and High Barnet branches. The former City & South London Railway was extended to Camden Town in the early-1920s to form a junction with the existing lines, resulting on one of the most complicated junctions on the London Underground, allowing trains from either direction to proceed onto any route, northbound and southbound, without any conflicting movements. An engineering feat in itself and featured in a poster of the time. There was also a poster produced showing an illustration of the junction tunnels. Part of the ground level station building was destroyed in the blitz, leaving only around 2/3rds of the building remaining, so looking a little unbalanced. The emergency stairs (all 96 of them, apparently!) still had the original light blue and white tiling from 1907, although they said the 1920s tiling at the top landing stage didn’t look original (*they weren’t, but they were a good replacement when refurbished by Tube Lines in 2008*). Many disused parts of the station were used for storage or as ventilation shafts.

The next part of the programme dealt with the deep level air raid shelters constructed at Camden Town in the early 1940s, some 20 metres below the existing running tunnels, but with the brick and concrete “header buildings” above ground. These did not come into service until early 1944, well after the Blitz, and closed just before VE Day in May 1945, so they had a very short life. The former bed frames were still in place, along with steel shelving used for storage of archives, but all unused for some years. These tunnels, along with others under the Northern Line at Clapham South and elsewhere, were intended to form part of an “Express Northern Line Tube”, which was never built, but made secure below ground storage areas. There used to be a direct connection from the shelters to Camden Town station, but this was bricked off completely many years ago, so that there was now only access point to the former air raid shelters from ground level.

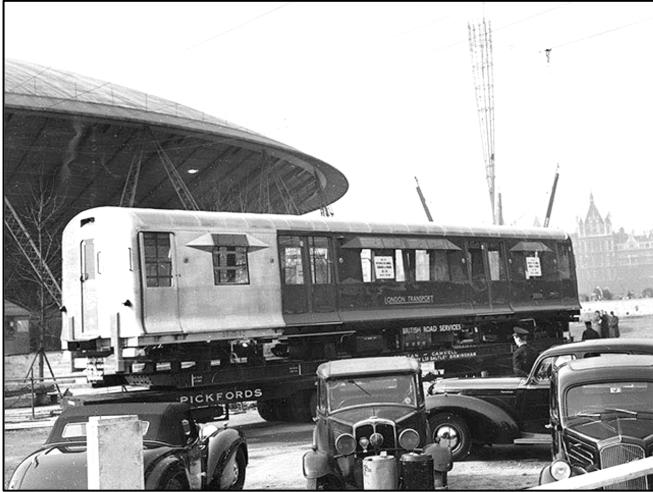


Back at the Acton Depot, Tim spoke with historian Catherine Ferry about the former Ealing Broadway-Southend-on-Sea through service which ran from 1910 to the outbreak of WWII in 1939. This enabled Londoners, especially those from the more affluent western suburbs, to have a day out at the seaside and some of the very imaginative art deco posters, designed by Charles Pears, which were used to advertise the service were shown. The through journey took about 90 minutes. There was an archive photo of one of the through trains at Ealing Broadway, hauled by a pair of District Railway Bo-Bo electric locos, as seen at Hammersmith (*Left*).

**Photo: LT Museum**

They incorrectly stated that the trains were “District Railway carriages”. *(They weren’t, as the trains were formed of London Tilbury & Southend Railway stock, but **hauled** by District Railway electric locos as far as the end of electrification, and then steam-hauled to Southend. They seemed to infer that locos were changed at Upminster after electrification in 1932, which wasn’t so – it was originally (from 1910) at Little Ilford/East Ham, but only for a very short time, and then at Barking right through to when the service ended in 1939).*

Tim and Sidy then looked at the post-war R Stock, which was introduced on the District Line from **1950** (not 1952). However, the aluminium-bodied R49 DM 22679 which they were in was built in 1952. It was said by Tim Dunn that the car was exhibited at the Festival of Britain in 1951. *(It wasn’t. One NDM car was displayed, but not DM 22679, the Festival of Britain car being R49 NDM 23231, which was scrapped along with the rest of the R Stock, apart from the three preserved cars remaining).*



**Above:** *(Left) The first aluminium car of R Stock was exhibited at the Festival of Britain in 1951 and is seen arriving on site. It was NDM 23231 and was delivered part painted and part unpainted. When later delivered for District Line service, it was painted all red.*

**Photo: LT Museum**

**Above:** *(Right) Preserved in the LT Museum is R49 DM 22679, which was delivered and entered service in 1952.*

**Photo: Brian Hardy**

Siddy then visited Sloane Square Station, constructed in 1868 as part of the then Metropolitan District Railway (now the District Line) using the “cut and cover” method, with an overall train shed roof, similar to those on the western side of the Circle Line at Paddington, Bayswater and Notting Hill Gate. She spoke to Ted Fowler, TfL’s Head of Built Architecture, about the station. The outstanding feature of Sloane Square station is that the Westbourne River passes over the railway in an enclosed waterway conduit inside a girder bridge, after being pumped up from below track level. The Victorians obviously felt that it was easier to maintain an overbridge, rather than passing under the railway tracks.

Siddy visited the pump facility and the river water could be seen flowing into the well, where it would be pumped up over the railway line and onwards to the River Thames. The station was modernised in early 1940 at the start of WWII, with the first escalators installed on a sub-surface station leading down to the platforms, but it was almost destroyed during the Blitz on 12th November 1940, when the station received a direct hit from high explosive bombs and the station building collapsed onto a departing District Line train, killing 42 people. Various archive photos and film clips were shown of the aftermath of the raid, with clearing up in progress. The train involved seemed to have been formed of pre-WW1 C, D, or E Stock. What was an amazing feat was that the station was repaired and reopened with temporary access facilities in just 12 weeks after the air raid. The overall roof was damaged beyond repair and was removed. The station was rebuilt again around 1950 for the Festival of Britain, and later had a six-storey office block built above it. At platform level, the original arches (now infilled) and the remains of the cast iron brackets for the overall roof could still be seen. There was a small locker room at the end of the westbound platform which still had its 1930s white and mint green tiling and advert panels, from when it was used as part of a passenger walkway. Another amazing fact about Sloane Square was that it used to have a pub on the westbound platform (“The Hole in the Wall”) with its own pub cat, “Kim”, at least until the 1950s. The pub was now a rather small convenience store. It was mentioned that in the early years of the 20th Century, there were at least 14 pubs on London Underground stations. Now there are none! *(Apart from Kew Gardens, of ex-main line origin, but does not have entry direct onto the eastbound platform).*

Towards the end of the episode, Tim was back at the LTM Museum Depot and spoke to our very good friend Geoff Thorne, Engineering and Technical Lead of the Q Stock Restoration Project, showing some of the salient features of the Q38 Stock, such as the smooth exterior and flared lower bodysides, as compared to the straight-sided N/Q35 Stock trailer 08063, with its continuous footboards at solebar level. Geoff explained how the cars were being restored as near as possible to their original condition, but without nicotine staining, although internal lighting would now be by LED bulbs, which had a much lower power consumption than the original incandescent bulbs. Geoff also explained the origins of the American-designed traction equipment dating back to the pre-WW1 era (1905-1914), with its characteristic 'clunk, clunk, clunk' sound from the contactors, which had been provided for the District Line electrification, largely financed by Charles Tyson Yerkes and other US financiers. Q38 DM car 4417 was virtually complete, with work now proceeding at pace on DM Car 4416 and N/Q35 trailer 08063 (complete with some noisy power tools being used in the background!) to provide a working three-car Q Stock train, which it was hoped would be able to have some heritage operation in the future. These were just as we had seen on our Acton Depot visits back in January and February, shortly before filming took place.

All in all, not a badly-presented programme, with very few noticeable "faux-pas" or factual inaccuracies.

## **EPISODE 2:**

### **South Kensington Station and Marylebone Station, and the Maps Store at the LTM Acton Depot:**

South Kensington was and is a very affluent area of London and following the Great Exhibition of 1851, several large museums, Natural History, Victoria & Albert, Science Museum, and the Imperial Institute, as well as the Royal Albert Hall, were built. The sub-surface station opened by Metropolitan District Railway in 1868, joined later by the Great Northern, Piccadilly & Brompton Railway deep level tube line in 1907. The entrances were of the iconic style of the Met. and Met District Railways. They then explored the long pedestrian subway from the station to the museums in Exhibition Road, opened in 1885. The subway had originally been designed by Sir John Woolf Barry and constructed using 'cut and cover' methods, as a cable tramway, but this never materialised, becoming the subway we know today. The subway has white bricks/tiling and skylights, now supplemented by lighting, to make it as light and airy as possible, to avoid walking on the ground level. Quotes from "The Times" of 28 January 1885 were shown.

Tim and Sidy then went onto the now disused eastbound Circle Line platform, which was now rather moss-covered, but the original walls were still in place. Originally the station had four through platforms with an overall train shed roof, which was removed in 1903 and replaced by the current platform canopies. The outer platforms (eastbound Circle and westbound District) had been disused since the late 1950s. *(No mention was made of track rearrangements or the removal of a centre (Circle Line) west-facing bay platform in 1957 or the westbound District bay in 1967 – it was really dismissed).* Trains only now used the eastbound and westbound faces of the remaining island platform. Mention was made of the gardens on the island platform, which now had an insect hotel. The long disused westbound District Line platform still had its structural ironwork, without the canopies, and was covered in overgrown undergrowth (mainly buddleia).

Tim and Sidy then explored the deep-level Piccadilly Line platforms, which were located above one another, eastbound above westbound, because of space limitations. They were opened in 1907 by the GNPBR (later the Piccadilly Line). The station was remodelled in 1973/74 with escalators replacing lifts. The lift shafts became disused other than as ventilation shafts from the Piccadilly Line. These were something of a "time capsule", with a lot of posters from the 1960s and early 1970s, just left where they were, with a lot of accumulated tube dust everywhere!

In the late-1890s, the "District" had planned a new express tube line from Earl's Court to the City with only one stop at Charing Cross – an early "Crossrail" if you like, but only a 36.5 metre length was constructed at South Kensington, which is now the access passageway down to the Piccadilly Line. A relic "hidden in plain sight" as it was put. During WW2, it was used by the LT Emergency Engineering Department to oversee war damage repairs to Underground stations (notably Bank and Sloane Square, among others). Tim spoke to Robin Sanderson, whose late grandfather Alex Sanderson, had worked there and a recording of part of a radio interview with him was played. He also produced his late grandmother's war diary, referring to South Kensington, as well as a hand-written ledger, detailing all of the war damage repair costs, station by station. Fabulous!

Tim and Sidy then went to the top of the disused lift shafts to see how the ventilation system worked. Some of the original parts of the GNPBR station still existed. *(However, no mention was made of the operational aspects of the Piccadilly Line lifts with its two-lower levels).*

Returning to the LTM Depot, there was a brief look at the District Line's Q Stock, with Q38 DM 4417. Tim posed the question "What happened to the Circle Line in 2009?". The answer (as we all know) was that TfL trashed it, ceasing to be a "circle", becoming instead an end-to-end 'pan-handle' route from Hammersmith to Edgware Road, via the entire Circle Line (partly shared with the District), in the interests of timetable regulation, even though it is still called the "Circle Line", mainly to distinguish it from the Hammersmith and City Line ("Hot & Cold"), which runs over the same route on the northern side as far as Liverpool Street, before branching off towards Aldgate East and Barking.



An archive photo of a District Line train at Embankment (then named Charing Cross) in 1956 was shown *(Left)* and stated to be Q Stock. *(It was in fact a red-painted R Stock, given away by the window flares on the NDMs).*

**Photo: LT Museum**

Tim spoke to Suresh Singh, who had often travelled as a boy with his parents and siblings, on the District Line between the East End to Ealing Broadway (and further west) where there were large Asian populations, and had been amazed at the architecture and design of the Underground, including the "magical" sliding door trains, so much so he became an architect as a result of those experiences.

### **Marylebone:**

The main line station had been the last terminal station built in London more than 100 years ago by the Great Central Railway. It is now served by Chiltern Railways and had been featured in many movies – "Paddington" and "Paddington 2" where it stood in for the real Paddington (too much OHLE there now) and the Beatles' "Hard Day's Night", representing Liverpool Lime Street. Its design included a superb "Porte Cochère" roof over the station entrance, looking more provincial than London.

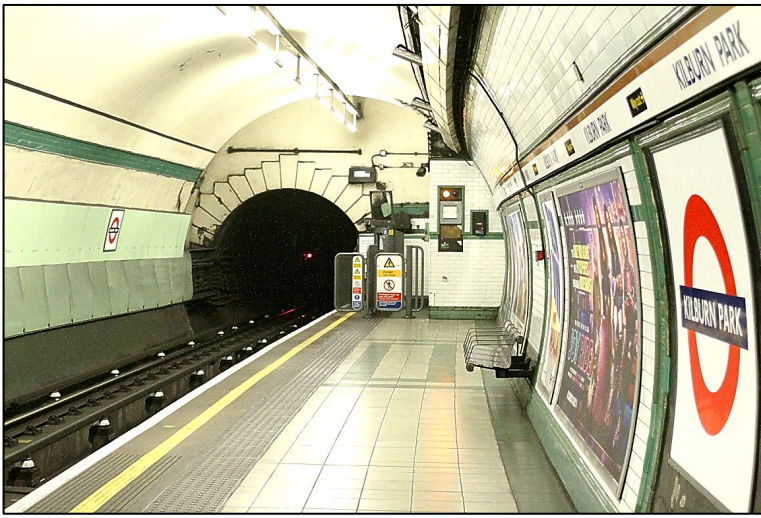
Under it was the deep-level tube (but only at 23m) of the Bakerloo Line, opened in 1907 by the Baker Street & Waterloo Railway. The station was originally named "Great Central" but was later renamed "Marylebone" in 1917 at the request of the GCR's then Chairman, Sir Sam Fay. Conversion from lifts to escalators started in the late-1930s, along with new subway access, but this wasn't completed until the 1960s, because of WW2 and post-war austerity<sup>1</sup>. The escalator equipment may have been installed in 1939 and in service until 1996<sup>2</sup>, although the new entrance didn't open until 1943. Some of the original tiling with the "Great Central" station name still existed along with some of the 1907 moss-green and white tiling. The platforms were extended in the 1930s to take longer trains (mainly 1938 Tube Stock and converted Standard Stock cars) but were damaged during WW2.

The emergency staircase, unused for over 80 years, still had its original 1907 white and green tiling and stair treads, with the balustrade mesh inserts, as well as the ventilation shaft up the centre of the shaft, now all over 115 years old. An interesting point was made that a nearby hotel had had to be designed to fit around the existing ventilation shaft, which had to be integrated into surface buildings around the Underground network.

Sidy then showed what she purported to be a 'bronze' signal by the headwall for drivers. *(It was in fact a yellow/green platform repeater for guards and station staff because the colour light starting signal was inside the tunnel out of their sight. The repeater was **NOT** a red/green signal).*

<sup>1</sup> Your Editor remembers, as a child in the 1950s, the passageway to the escalators being very unfinished with no tiling, akin to how the extended sections of the Central Line central area stations were into the 1950s and later.

<sup>2</sup> The pair of 1943 escalators survived until recently, with three machines replacing the pair and fixed stairs.



These photos show an example of one of the bronze platform repeaters but at Kilburn Park. That at Marylebone was similar, having equipment beneath. The photo (Above) shows the need for the repeater for guards (in days gone by) and platform staff, as the starting signal would be out of view to them. The photo (Right) shows a close up of the repeater signal.

**Both photos: Thomas Crame**



Back at the LTM Depot, Tim spoke to Assistant Curator, Chris Nix, in the Maps Store and looked at some very elegant pre-1933 enamelled wall maps. Many of the line colours then were quite different to what we know today, which came as a result of a series of decisions made over time, with no one person deciding line colours. In the early 20th Century, the various tube lines were all independently owned and operated and chose their own line colour to stand out against others, until many were amalgamated under the "Underground Electric Railways of London" (UERL) umbrella, which rationalised them until LPTB was formed in 1933, 90 years ago last July.

An experimental map was shown, designed in 1970 on a geographical basis rather than as a diagram, but which was never used! (*Your writer wonders why?*). Then along came the LPTB in 1933 with Harry Beck's iconic "map", which was rather more of a line diagram, setting the benchmark and being used, with many regular updates ever since, with most of the current line colours becoming established in the 1970s. Obviously, there have been subsequent additions since then, e.g. Jubilee Line, Elizabeth Line, DLR, Overground, and Thameslink Central area from Kentish Town West to South London.

Not bad, apart from several glaring errors about the Q Stock and signalling!

### **EPISODE 3:**

**Green Park (formerly Dover Street) station and the closed and abandoned Down Street station,** These stations are (or were) located in the extremely affluent and wealthy Mayfair area of London, close to several Royal residences. Both stations had been opened in 1906 by the then Great Northern, Piccadilly & Brompton Railway, which later became the Piccadilly Line, and were the usual Leslie Green red ox-blood exterior tiling, common to those stations. Green Park was one of the busiest stations on the Piccadilly Line with nearly 5m passengers in 1929.

Green Park, along with Hyde Park Corner, was upgraded and modernised in the early 1930s with two escalators replacing lifts, resulting in relocated ground level station entrances. As a result, Dover Street was renamed "Green Park" and Down Street was closed in 1932, as it was little used. Similarly, Brompton Road closed in the same year. (*Actually, in 1934*). A further third escalator was installed in 1955 which came from Waterloo, which had been installed there in 1951 for the Festival of Britain. Green Park was upgraded again for the opening of the Victoria Line in 1969 and the Jubilee Line in 1979. The station had a further upgrade in 2011 with step-free access in time for the 2012 London Olympics, the exterior being clad in Portland stone, complete with the fossil imprints, resulting in a mottled appearance.

Below the current station was a labyrinth of abandoned tunnels, now mainly used as ventilation shafts for all three lines (Jubilee, Piccadilly, and Victoria), but which had been used during WWII as a bomb-proof HQ for London Transport, as described by social historian, Katy Wignall. Several WW2 archive photos were shown, including damage to a tram depot. There had been over 124,000 shelterers on platforms during air raids and the conditions were extremely primitive, but improvements were made

later. Quotations were shown from the diary of Madeleine Henrey, one of the many shelterers. In addition to LT's HQ at Green Park, Down Street and Brompton Road had also been used as bomb-proof bunkers in the 'Blitz' of 1940-1941, and again in 1944-1945 against V1 'doodlebugs' and V2 rockets.

Very few diagrams and plans existed for the wartime conversions and there was only one diagram of Green Park's bunkers in the LTM collection. Parts of the lower levels were still accessible, with remnants of its wartime use still in situ, but many had been subsequently bricked up, to separate any operational areas. There were also glimpses of its Edwardian origins, in tiling and wall decorations, such as a 1906 "Way Out" cartouche. The former stair shaft had been capped off and the former lift shafts were used for ventilation.

Heading towards the Jubilee Line, the wall tiling gradually turned from blue to silver. There was a purpose-built ventilation shaft, some 4.5 metres in diameter, with a stairway linking all three lines. The Jubilee Line was some 31 metres below ground level, with the Victoria Line some 8 metres above it, with the Piccadilly Line at the top. It is one of the busiest interchange hubs on the Underground network. Back at the LTM Acton Depot, Tim posed the question: "What is the busiest underground line in terms of service frequency? Answer: The Victoria Line, following its signalling upgrade in 2018. There was a peak hour frequency of one train every 100 seconds! (*Because the line has fully automatic train control of its 2009 Tube Stock trains*).

Moving on to the closed Down Street station, in the disused areas, there is still evidence of its Leslie Green origins in the ox-blood coloured exterior tiling. It had been underused for many years and the station had closed in 1932, being adapted for use by the "Railway Executive Committee" (REC) during WWII to control the logistics and operation of mainline railways and London Transport, and as a communications centre with the War Department, The Admiralty, Air Ministry, Bletchley Park, Downing Street, and other important locations and to control movements of troops, equipment, munitions, food, and other supplies. The ticket hall was now a shop, but other areas, such as the stairway shafts, lay undisturbed. Relatively luxurious offices, meeting spaces, telephone exchanges, kitchens, dining rooms, toilets (plumbed in!) and even dormitories, designed and fitted out by the LMS Carriage Works, had been constructed on the former station platforms, with only single skin brick walls separating them from the main running tunnels. There had been seven different power supply systems, including batteries, to avoid disruption.

Chris Nix, LTM Assistant Director, explained the importance of the underground bunkers to the war effort. It was reputed that the then Prime Minister Winston Churchill had visited Down Street on several occasions during the war. He recounted the apocryphal story that Winston Churchill had 'camped out' there and was less than impressed with the then facilities, ordering that some be built for his personal use, including a bath! These were rapidly built in five weeks and a copy of the original memo with the required specifications was shown. A small section of platform was available for staff to enter or exit

the station unseen by the public, by pressing a button, which would cause a red signal to be displayed to inform an approaching motorman to stop at the station. REC staff would enter the train via the driver's cab. Facilities like these were "off ration", as were all underground bunkers.

**Left:** An eastbound train stationary at the short platform at Down Street, with the (red) light illuminated. The stock is interesting in that the motor car is of 1925 Cammell Laird vintage – the older Pre-1938 Tube Stock cars were not normally allocated to the Piccadilly Line, but during WW2, anything that was serviceable was pressed into service.

**Photo: LT Museum**

Back at the LTM Depot Documents Store, Food Historian Jennifer Ryan described the catering facilities in the WWII bunkers, as these were not subject to rationing and had high levels of cuisine for the senior staff and REC Members.

Chris Nix explained that the bunkers had been well equipped for their purpose to be connected to the outside world, such as the War Department (Army), The Admiralty (Navy), Air Ministry (RAF), Bletchley Park, Downing Street, and other important locations. He showed a numbers of diagrams and plans of Down Street, showing the huge scale of the works and its detailed layout, as well as one of the teleprinters that were used to maintain rapid communication at some 75 words per minute (much faster



than Morse Code), 24 hours a day 7 days a week, with staff working 12-hour shifts for up to two weeks at a time. The teleprinter was the only one in the LTM Collection's Small Objects Store.

Good, interesting programme, without any obvious "gaffs".

## EPISODE 4

### **The abandoned Central Line "British Museum" Station, Leinster Gardens, and working life on the early Underground lines (Met. & District) in steam days:**

The programme opened with Siddy in Bloomsbury where the British Museum opened in 1759. Before 1933 there was a Central London Railway station called "British Museum", some 150 metres from the Piccadilly Line's Holborn Kingsway Station. The Central London Railway had opened in 1900 and ran from Shepherd's Bush to Bank, but later extended at each end to Wood Lane (White City) in the west and Liverpool Street in the east. In 1913, the CLR became part of the Underground Electric Railways of London Group. In early 1914, plans were prepared to combine both British Museum and Holborn Kingsway stations to provide a better and easier interchange between the Central and Piccadilly lines, but these were delayed by WW1 and the work did not start until the 1920s, to create new platform tunnels and Holborn for the Central Line and close British Museum. The two stations were finally merged and became one station in 1933, with the new Charles Holden designed ticket hall and frontage at Holborn Kingsway, along with Passimeter ticket kiosks. British Museum station closed on 24 September 1933.

British Museum station no longer has any access from street level, as the building above it was demolished in 1989 and the lift shafts sealed and capped off. The only means of access was a "Track Walk", once trains had stopped and traction current was discharged. Roy Kenneth, ERU Manager, gave a safety briefing and explained that they had to be back at Holborn by 05.00 before traction current was restored at 05.20 for trains to run!

Few people had seen British Museum station, because of its extremely limited access, some 25 metres below street level. It still retained much of its original white glass roof and wall tiling from the 1900s, although the platforms had been removed many years ago, certainly pre-WWII. The original platforms had been of wooden construction, some 99 metres long, with eight cross passages between the platforms, which had been electrically lit, but had been closed off with brick walls and floors to form two-level air raid shelters during WWII from September 1941 until 1945. Some 625 people had sheltered in the station each night. The marks of the walls and floors could be seen against the tiling. There was even some decoration applied to the former westbound platform wall, where a children's play area had been located. After the war, the shelters were removed and the area used for storage, and as a control centre until 1960, but the platforms were later removed completely.



*Left: The remains of the siding, which was located west of British Museum station. It was provided from when the Central London Railway opened in 1900 and also had a loco spur in its early days. (It was claimed in the programme that had been installed in 1933 in one of the disused station tunnels). After EMU stock was introduced on the CLR in 1903, two six-car trains could be accommodated in the siding and it was used for stabling from time to time into the late-1940s. When longer trains were introduced (7/8 cars of Pre-1938 Tube Stock and 8 cars of 1962 and 1992 Tube Stock), only one train could be accommodated. Although little used post-1950 (apart for emergencies and specific engineering work), the siding was decommissioned in May 2016. It was a dark and rather unpleasant place for drivers to change ends.*

**Photo: Ed Mackintosh**

Proceeding up the remains of the stairs to where the lift shafts had been, there were still posters and painting in situ dating from the later days of the station, including an advert painted directly onto the tiling for "The Times Furnishing Co. Ltd.", in Times Roman font. There were many other advert posters dating from the 1920s and early 1930s. Between its closure in 1933 and the start of WW2, the station had been used as a film set, including "Bulldog Jack" (*whatever that film was about!*) and was allegedly haunted by the ghost of an Egyptian Pharaoh!

Back at the LTM Depot, Tim Dunn asked which celebrated US author had travelled on the CLR on its opening day in 1900. Answer: Mark Twain, more usually associated with stories about the 'Wild West', etc., rather than the wilds of West London. Tim then visited the Poster Store at the LTM Depot and spoke with Georgia Morley, Senior Curator (Collections). She showed a "Ladies Only Christmas Shopping Season Ticket" from 1912, only valid off-peak between Wood Lane and Bank, to encourage ladies of the time to go shopping in Oxford Street and elsewhere along the CLR. In the early 20th Century, Frank Pick, Chief Executive of the UERL Group, had commissioned well-known female artists to produce attractive colourful posters for the Underground Group, including Dame Laura Knight, Dora Batty, and Margaret Calkin-James, of whose 1926 poster "Q.E.D." (the Latin 'Quod Erat Demonstrandum') was shown, which made no direct mention of the Underground, but it was obvious what was its intention as regards visiting West End theatres, etc. In the 1930s, many posters featuring fashion of the times were produced by the artists, Clifford and Rosemary Ellis.

Siddy then went to a site between Bayswater and Paddington. This wasn't a station, but a certain pair of house fronts in Leinster Gardens (actually 23 & 24), where the original houses had been demolished during the 'cut-and-cover' construction of the Met's. 1868 extension from Paddington to High Street Kensington and South Kensington (now part of the Circle Line). As trains were steam-hauled, there had to be open air sections to allow steam and smoke to escape. The original Bayswater station had been opened in 1868 and had had a wrought iron and glass overall roof for many years (like Notting Hill Gate and Paddington) but only a short section remained, as the station had been partially built over, with a car park built over the platforms in steel girders, under what was left of the overall roof!

It was claimed that it had had five name changes during its life (*which is open to debate – Ed.*). To satisfy the then residents of Leinster Gardens, many of whom were wealthy professionals, merchants, and traders who didn't want an ugly gap left in the terrace, the Met. constructed two false fronts of similar style to the adjoining houses, several of which had been owned by the Met. and occupied by senior railway staff, including an Inspector, as recorded in the 1871 Census. Author and Historian, Professor Sarah Richardson, recounted the responses of residents of Leinster Gardens during the construction of the line by the Met. in 1867/68, as reported in the "Daily News" of 16 September 1868. The front doors and windows had simply been painted onto the false stone facade and brickwork. There was no door furniture or letterboxes. Looking round the back, the "ugly gap" was all too clearly seen, with steel girders between and supporting the houses on either side, as well as girders spanning the cutting to support the side walls, with Circle and District Line trains passing frequently below.

At the LTM Covent Garden, Tim met steam enthusiast Laurie Rose, in front of Met. Railway Beyer-Peacock A Class 4-4-0T No.23, the only surviving loco of that era, and explained the "condensing" system, which wasn't a very efficient use of steam, as the locos would have had to use the blowers to maintain a draught on the fire. Various archive photos of the Met's. and District's steam locos were shown. The Met. had acquired a fleet of 40 A Class condensing tank locos, and the District had acquired a fleet of similar locos for its services. There were no cabs, only a spectacle plate to give some protection to the loco crews, many of whom did not like having cabs, although some locos were later fitted with them. The tunnel atmosphere was noxious and acrid from the steam and smoke, and was a physically very hard job for drivers and fireman. All that went in 1905 with electrification of the Met. and District lines.

## **EPISODE 5**

### **West Ashfield and Oval:**

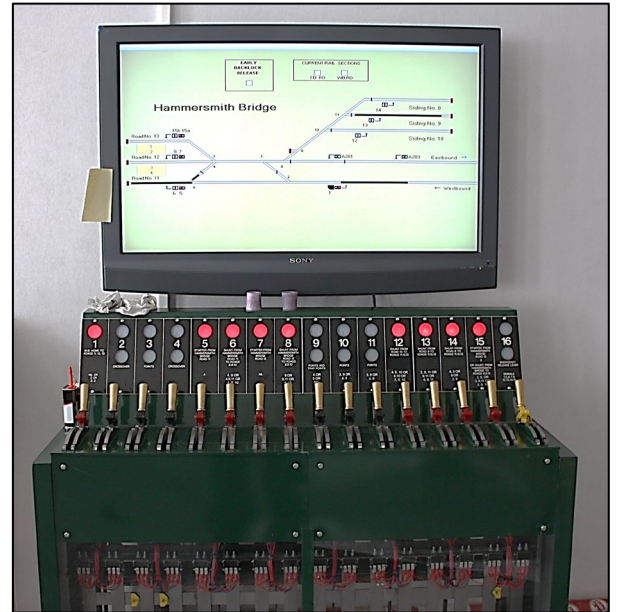
The presenters visited the current LU Training Centre located in "Ashfield House" located next to West Kensington station. It had been named in honour of Albert Stanley, later Lord Ashfield, the Chairman and Managing Director of UERL and later London Transport until the late 1930s. On the third floor of Ashfield House, there is a mock-up of a complete Underground station to enable new staff to be fully trained in the operation of stations, from the ticket gate line down to the platform/track interface and communications systems. It is the 273rd station on the London Underground but it will never see any trains depart nor see any passengers! There is a short section of track with all the usual equipment (train stops, stopping marks, etc) and the front part of a mock up 1983 Tube Stock DM numbered 3637, disappearing into the running tunnel (also a mock-up) to give some semblance of reality, which also doubled as an immersive classroom environment, to teach staff how to deal with on-train incidents safely and efficiently, such as detraining. The 'District Line' route maps and car line diagrams even had "West Ashfield" showing (between West Kensington and Earl's Court) to add to the realism. The destination blind even showed "Upminster" – a place where 1983 Tube Stock would never have gone in normal service.



The original Railway Training Centre had been opened in 1920 by the UERL, to replace smaller training facilities of the individual pre-1920 tube railway companies, and was located above Lambeth North station, with easy access to the Bakerloo Line, with archive film clips being shown. There were rigorous entry requirements, with a failure rate of some 39% – so not an easy job to get! The Lambeth RTC was later relocated to “Shepherd’s Bush”, or more correctly “White City”, near the Central Line Wood Lane Depot, which I am sure would have been familiar to many of our members, especially those who worked on the Underground.

The Training Centre Instructor, Lee Radley, explained the workings of the communications systems, including the tunnel headwall telephones, CCTV screens, and a telephone in a yellow box that connected directly to line controllers, in the event of traction power needing to be switched off.

There was even a G Scale model railway for teaching signalling staff about the operation of trains. At the time of their visit, it was undergoing an upgrade, so wasn’t operational. There were a selection of LU tube and SSL one-car trains, and full colour light signalling. Tim had brought along a G Scale battery-powered loco, with remote control and fitted with a camera, to get a driver’s eye view of the layout, which was controlled from a 1920s Westinghouse lever frame, with fully interlocked points and signals. Some of the stations had fictitious names, like “West Ashfield” and “Strand-on-the-Green”, perfectly adequate for training purposes.



**Opposite:** Four views of the model railway in Ashfield House, part of the training suite that includes “West Ashfield”. Each carriage (of S Stock) represents one full-length train. Centre Left shows the main running lines in the foreground with access to three stabling sidings via a reception road. The 1920s signal lever frame (Centre, Right) is a good recreation and is not original as might be first thought. Looking away from a terminus (Bottom Left), with three sidings (without a reception road) in the distance. The signal on the right has an illuminated rail gap indicator. An example of multiple home signals (Lower Right) which enables trains to approach closer together, thereby increasing service capacity.

**All photos: Brian Hardy**

Tim and Siddy then tried their hand on the S Stock cab simulator, not entirely successfully, with several station overruns (so stick to their day jobs!). The first cab simulator (crude by today’s state of the art

facility) was set up in 1966 at White City. It took some 12-15 weeks to train a driver (now Train Operator – TO) depending on the line or type of stock. Trainees spent at least five days on the cab simulator before they even got a sniff of the real thing!

Back at the LTM Depot at Acton, Tim posed the question: “If the Waterloo and City Line at 2.4 km is the shortest Underground line with just two stations, which was the longest? No prizes for the correct answer. The Central Line at 74km with 49 stations, but the District Line, although shorter, had 60 stations, the most of any line.

Assistant Curator, Chris Nix, explained that from the formation of LPTB (or LT) in 1933, there had always been innovation in design and operation, not only with infrastructure, but also the trains. He showed archive photographs of the experimental 1935 Tube Stock, with its streamlined cab ends, which were very much in vogue at the time. Chris implied that there had been two streamlined trains of 3 pairs of 2-car units, each with streamlined cabs, and two with the later flat-fronted cabs. *(This was incorrect. There had been four trains in all, THREE with streamlined cabs, each of 3 x 2-car units, and ONE with three flat fronted cabs, which were the effective prototype for the iconic 1938 Tube Stock. This is a well-documented subject, so 0 out of 10 for accuracy!).* The driver had a central seating position in what was like an armchair, with joystick-style traction and brake controls. It was found that at the relatively low speeds of tube trains, streamlining of the cabs was ineffective, as well as taking up some passenger space at the car ends.

This innovation was carried on through LT with continual improvements, and Chris Nix showed three large scale models of the DM cars of the prototype 1986 Tube Stock (red, green, and blue). *(It was said they were all built by Metro-Cammell, but only two were, with the third (the blue train) built by BREL at Derby – photo, Right).* These were built to test out constructional methods, equipment and various seating layouts. The 1986 Tube Stock had run for about three years in a variety of configurations, mainly on the Bakerloo and Jubilee lines, based at Neasden, until a major derailment ended their brief life.



*(The 1986 Tube Stock actually had a life of 15 months in passenger service and never operated on the Bakerloo Line).* They formed the basis of the Central Line 1992 Tube Stock, with monocoque extruded aluminium bodyshells, combining all the best features of the 1986 Tube Stock. All of the 1986 Tube Stock cars were scrapped, except for DM Car 16 from the ‘green’ train, which is preserved at the LTM Depot.

**Previous Page:** *(Lower Left and Right) The incident that ended the service life of the 1986 Prototype Tube Stock was a serious derailment at Neasden on 14 August 1989, these two photos showing the aftermath after the train came to rest. The train actually comprised one two-car unit of each type (red, blue and green).*

**Both photos: The late Bob Greenaway/LURS Collection**

Tim and Sidy then moved on to South London and Oval station, which had originally been named “The Oval” until 1894 after the nearby famous cricket ground, with which it had close connections, where there was a plaque recording the first ever Test Match against Australia in 1880. The station had been opened in 1890 by the City & South London Railway, between Stockwell and King William Street, but was later extended at each end to Moorgate in the north *(and subsequently to Euston)* and Clapham

Common in the south. A feature was the central narrow island platform, which still exists at two Northern Line stations. (*There were only five C&SLR stations that had narrow island platforms and Oval wasn't one of them – the two Claphams, the original Stockwell, Angel and Euston. Only Stockwell was on the original opening section*). The station had originally had a domed roof, which housed the lift mechanisms<sup>3</sup>, but this was removed when the station was rebuilt (with escalators and Passimeter ticket kiosks) to a Charles Holden designed ticket hall in the early 1920s, reopening in November 1924 with the extended Northern Line<sup>4</sup>. There were further refurbishments in the 1970s and 1990s. In the disused parts of the original station, the aubergine and white metal wall and roof tiling were still in situ. The former lift shafts were now used for ventilation, but were unusual in that the upper parts were cast iron tunnel ring segments, but brick lower down. The lifts had originally been hydraulic using water pressure, generated from the Stockwell power station, but failures occurred with burst water pipes and they were later replaced by electric lifts. Of interest was the fact that the station tunnels were “semi-oval” rather than the more usual circular construction.



**Above:** The two remaining narrow island platforms are at Clapham North (Left) and Clapham Common (Right), these being modern-day views.

**Both photos: Brian Hardy**

Beneath the station tunnels, deep level air raid shelters had been (*partly*) constructed during the early part of WW2, but these had been abandoned due to difficult ground conditions, and were later used for ventilation.

Tim spoke to Customer Service Assistant (CSA) Glen Sutherland about the “Thought For The Day” quotations on the Customer Information white boards, which had started at Oval, but now appeared at many stations on the LU network, especially the “All On The Board” ones.

At Morden, there were some small gardens on one of the side platforms, where a variety of fruit and vegetables were grown, as explained by Customer Service Manager (CSM) Tony Samuels. These had been started by the Underground companies around 1910 as the “Best Kept Station” competitions to encourage tidy station gardens. Some of produce was made into some very hot and spicy sauces, ending with Tim’s droll comment of “Don’t ever grow that again!”.

Again, not a bad programme, apart from the ‘gaffs’ about the 1935 and 1986 Stock trains.

<sup>3</sup> The domes were originally for decoration and only housed lift machinery after the water hydraulic lifts were replaced.

<sup>4</sup> The City & South London reopened under the line name Hampstead & City, renamed Edgware, Highgate & Morden Line on 12 November 1933 (and officially shortened to Morden-Edgware Line in June 1934), and then the Northern Line on 28 August 1937.