

THE CENTRAL LINE EXTENSIONS AND THEIR IMPLEMENTATIONS

by Eric Stuart

BACKGROUND

Until the Industrial Revolution, cities tended to be small. After all, most people had to walk everywhere. With the Industrial Revolution in the 18th century, cities began to boom and grow. This growth precipitated and enabled mechanical means to allow people to get around. Railways enabled people to make a step-change (excuse pun) increase in distance travelled – mostly for work, but also for leisure. Tramways and buses increased this mobility. In London, the underground and tube railways allowed movement within the central area.

By the 1930s, the population of inner London had largely stabilised, but that of outer London was increasing. With improved housing in reality and the desire to own a home with a garden, the outer suburbs were growing. Bearing in mind the low car ownership until the 1950s, there was a need for good public transport links to the new and growing suburbs.

THE PLAN

Thus was born the 1935 New Works Programme for London railways. Whereas the Southern Railway had continued and expanded the electrification plans of its constituents, the three other railway companies serving the capital had not instituted any of the plans for electrification that they had. This had been hindered by the recession of the 1920s and 1930s. The New Works Programme would thus provide employment and meet a foreseen transport need by electrification of some existing lines and in the building of others.

Although the Metropolitan and District Railways had extended into the country, what are now the 'tube' lines had projected no further than Ealing, Edgware, Enfield and Morden. The New Works Programme would see the 'tube' lines pushed out much further. Apart from easing transport in and out of Central London, it was felt that the economics of the system would be enhanced as the fares of the longer distance regular passengers (what we now call 'commuters') on the trunk sections would cross-subsidise the inner-London sections of the combine.

The Northern Line plans have been well dealt with in the supplement to *Underground News* published some three years ago. This article seeks to take the Central Line story beyond where Piers Connor's recent series left off.

The Central Line extensions in the west were to replace the sparse GWR and LNER services between Paddington/Marylebone and the Denham/Harefield area and the suburbs in between.

In the east, the services from Fenchurch Street and Liverpool Street to Shenfield would be electrified for LNER services, whilst the LNER lines to Ongar and around the Fairlop Loop would be integrated with new tube lines from Liverpool Street to Leyton and Leytonstone to Newbury Park.

EXISTING SERVICES – GWR



The GWR had been a leading exponent of the Steam Railmotor or Railcar – a self-contained and self-propelled forerunner to the diesel multiple unit. Although these had been replaced by the Autotrain with a separate locomotive, the GWR had built up a network of simple stopping places, called halts, both in the country and in built-up areas around London and other cities. This enabled them to compete on better terms with bus and tram services.

Left: Typical GWR Steam Railmotor in action at Southall on 19 October 2014 on the Brentford branch.

Photo: Tim Easter

By the 1930s, the services which concern us were as follows:

- Old Oak Lane, North Acton, Park Royal West, Brentham and Perivale halts. These were served by Autotrains to and from Westbourne Park, connecting there with Hammersmith and City trains or occasional main line stopping trains. Some services worked through to or from Paddington.
- Greenford, Northolt, South Ruislip, Ruislip Gardens and West Ruislip stations. These were served by some of the trains serving the halts just mentioned and by some trains to/from Ealing Broadway via the Greenford Loop.
- Some outer suburban services to and from Marylebone and Paddington served those latter five stations, plus Denham.

But the trains could be infrequent and irregular.

As far as Greenford, these services would be largely replaced by the extension of the Central Line from the junction at North Acton, with stations at Park Royal, Hanger Lane, and Perivale. Old Oak Lane halt would not be replaced, whilst Brentham and Park Royal West halts would be jointly replaced by Hanger Lane. Stations from Greenford onwards would be served by the Central Line at new platforms but, apart from Northolt main line station, which was closed, also by some GWR/LNER outer suburban trains, plus the Marylebone – West Ruislip stopping service. Harefield Road would be a new station, served only by the Central Line.



Above: Two views of the GWR 'halt' at Perivale from road level in Horsenden Lane South, looking at the ticket office and entrance to the Up platform (*Left*) and access to the Down platform (*Right*). Note the typical GWR 'pagoda' waiting shelters provided on both platforms.

Both photos: London Transport Museum

EXISTING SERVICES – LNER

The LNER had through trains from Fenchurch Street and Liverpool Street to Ongar and intermediate stations, and around the Fairlop Loop. Some of the latter went completely round and back to London, sometimes with a layover at Fairlop, whilst others went via the third side of a triangle at Ilford to terminate there. These services worked in both directions. All were roughly half-hourly, increasing at peak times and thinning in extreme off-peaks. The service was much more frequent than the GWR services, serving a greater population. Trains consisted of 8-coach suburban block trains or the famous Quint-Art suburban sets and could carry up to 700 passengers at times.

POST WAR CHANGES

We can see today the results of unrestricted city growth around the world. The post-War Labour Government published the Town and Country Planning Act in 1947. One of the significant aspects of this was the implementation of Green Belts around major cities, where no new building or only very restricted building would be allowed. For London, this policy meant that areas to be served by some of the 1935 proposals would not be developed as anticipated and so neither would the expected population levels be reached. Thus the *raison d'être* for parts of the Programme vanished. The result was the suppression of the Northern Line extension beyond Edgware and that of the Central Line to Harefield Road and Denham. Otherwise, the plans for the Central Line went ahead, although the population of some areas served by the Central Line extensions has never grown as much as it could have done.

The new depots for the line were to be built on 'green field' sites, near where the new estates with a new population would hopefully supply a ready source of staff.

The West Ruislip extension was entirely above ground, consisting of laying of a second, separate pair of tracks to the south of the existing GW and GW & LNER Joint lines as far as West Ruislip (and would have continued to Denham). Nonetheless, considerable engineering works were involved, especially to carry the Central Line, free of any contact with the GWR, over the triangular junction north of the Greenford Loop, plus a steep single line up from the Loop to terminate in a bay in the middle of the new Central Line island platform. Further west, another flyover took the line over a connection to sidings.

All the new stations west of North Acton had island platforms. A centre siding for reversing trains was provided west of Greenford, although this was later replaced by a similar facility at Northolt (see below). At West Ruislip, the island platform was intended for trains continuing to and from Denham, with a third line with a bay platform for terminating trains. As the Denham extension never came about, the island platform became the terminus and the third line (No.23 Road) never got its platform. The Denham terminus was to be a three-road arrangement, probably after the style of White City and Loughton, but as a terminal.

IMPLEMENTATION

Work proceeded as fast as post-war conditions allowed and the first service changes noticeable to the public came in 1946.

Much of the tunnelling east of Liverpool Street had been well advanced by the time the war started. Parts of the incomplete tunnels were used as a factory, as is well-known, and parts used as air raid shelters, which became notorious as a result of the catastrophe at Bethnal Green, when a shelterer fell down some stairs and many people were killed and injured in the crush that ensued. Fitting out of these tunnels continued.

Current was turned on between Liverpool Street and Drapers Field, Leyton, on 18 November 1946, allowing trial running off-peak, at 7½ minute intervals, of trains running empty east of Liverpool Street. The trains reversed over a crossover on the bank approaching the junction with the main line on the Stratford side of Leyton. Official opening of the service to Stratford was carried out by the Minister of Transport on 3 December and the public service began on 4 December. With effect from that date, a 5 minute interval service was provided off-peak, increased to 4 minutes in peak. The basic reversing facility at Drapers Field precluded a more frequent service. The service interval between Wood Lane and Liverpool Street was generally 2 minutes to 2½ minutes, with 5 minutes in the evening, slightly less frequent on Saturdays and 5-6 minutes after 10.00 on Sunday. Passengers could interchange at Stratford with many of the steam train services to the east and north east of London.



Left: A Central Line train in platform 3 at Leytonstone, just after opening. Main line trains to Woodford and beyond reversed in platform 1 (to the left) and a footbridge was provided for interchange purposes, plus the fact that the reconstruction of the station was then far from complete.

'North' of Leytonstone, most level crossings were to be suppressed, as their presence was incompatible with the much increased train frequency. Bridges and subways were used in many places. A peculiarity of the line was that the principal station building was on the Down side, so footbridges and subways were needed to get passengers to the London-bound trains, with supplementary entrances on that side. In later years at least, these were often closed off-peak,

meaning many passengers had to cross the line, go through the barrier that was open and then cross back again, often irritatingly missing a train!

On 5 May 1947, the service was extended to Leytonstone at roughly the same intervals as they had been west of Liverpool Street, except that they were 5 minutes in the off-peak Monday to Friday. This was a more radical change to the service, as it had to be blended with the steam trains still operating to Woodford etc. Generally, the steam trains ran at 30 minute intervals to Epping, extended hourly to Ongar, off-peak, and every 20 minutes to Epping during the peak, with a ten-minute interval as far as Loughton and two trains an hour through to and from Ongar. At Leytonstone, the Central Line trains terminated in the Up and Down (i.e. eastbound and westbound in LT terminology) platforms, whilst the steam trains to/from Loughton and beyond used the new outer face of the Up platform that had been built to accommodate electric trains off the un-opened Newbury Park via Gants Hill extension. There was little shelter there then for a rainy day. No facilities for a run-round existed and the engine for the return journey to Loughton etc. waited on the approach to the Up line from the Newbury Park tunnels.

The discrepancy between the capacities and service intervals of the steam and Central Line trains did not make for harmony. Here is a report of events in the rush hours of the initial weekday:

“On the opening day some very awkward overcrowding occurred at Leytonstone in the morning when steam trains disgorged some 700 passengers who could not, of course, be accommodated in the connecting CL [Central London] line train. The evening rush at Liverpool Street at 5.25pm, Leytonstone passengers were being turned away from the top of the escalator. At 5.35 they were descending again, and at the Down (eastbound) platform there was a crowd three to four deep lining the platform. A train terminating at Liverpool Street arrived, well packed, and the crowd therein had to push its way through and behind the crowd [on the platform] to reach the escalators. The next train (for Leytonstone) arrived already full, and people were trying to get on and off simultaneously. When the situation had sorted itself out, there was some difficulty closing the doors. Still the crowds were pouring down the escalators, and the crush was not noticeably relieved. The next two trains were for Liverpool Street and Leytonstone respectively, and the performance was repeated. Two further Leytonstone trains followed, and as far as could be seen the crowd all managed to get on.”

I suspect that, as from that date, the Fairlop Loop service was cut back and only ran between Woodford and Ilford, possibly with some through trains to/from London. At the time, the Ilford Car Sheds would be under development, hindering the Seven Kings side of the triangular connection. Information to confirm/refute this would be of interest.

In those days, railways in Britain carried large amounts of parcels which the Central Line trains could not accommodate. The stations on the line were still operated by the LNER and, during certain off-peak times, to cater for LNER parcels trains, certain Leytonstone trains reversed east to west at Liverpool Street, giving a number of 10-minute intervals. Such trains picked up their scheduled westbound working, thus spending some 37 minutes in Liverpool Street siding! The LNER freight trains ran at night, although that seems to have changed later.



Left: Typical GWR/WR Autotrain, this at Kidderminster. In the London area, the similar 54xx class of loco was normally used with older pattern trailers, some of which had been rebuilt from the steam railcars. The Autotrain service between Westbourne Park and Greenford was withdrawn with the last trains on 29 June 1947 and the halts mentioned above were all officially closed. In fact Park Royal West, Brentham and Perivale had ceased to be used with effect from 15 June.

These stations had to be demolished to make way for electrification work. Apparently, there was little celebration of the cessation of the service, few people travelling on the last day (a Sunday),

although the last service at 20.56 through from Paddington and the return (worked by 0-6-0PT 5411) had a few passengers who made a nostalgic round trip.

The next day, 30 June 1947, saw the introduction of the first Central Line extensions in the west. Peak service interval was normally 6 minutes alternately to Ealing Broadway and Greenford, 7½ off-peak and 10 in the evening. Four trains were stabled overnight at Greenford, where a centre reversing siding was provided just west of the station.



Above: Looking west from the Down main line platform (with gas lamp) at Greenford around the time of opening, or more likely during trial running, judging by the train's set number of '99'. There was a single reversing siding which could accommodate two trains, and two trains were stabled overnight in the platforms, one in each. At that time six-car trains were the norm.

By the autumn of 1947, the layout at Newbury Park was being extensively altered in connection with the forthcoming extension in the tunnel via Gants Hill. The Up and Down tracks (i.e. the Outer and Inner Rails) had been moved further apart just north of the station and sidings were being laid between. Sidings were also being laid in on the west side of the line between Newbury Park and Barkingside. The track had been laid in the tube tunnels as far as Newbury Park, but not joined to the LNER although the points had been laid in. The LNER lines came from Ilford and Seven Kings by a triangular junction, which was eventually obliterated in two stages by Ilford Car sheds and associated sidings.



Left: The rear of a Central Line train departing from Newbury Park and heading left for one of the nine stabling sidings which were west of the running lines and centre reversing sidings. When the Newbury Park extension was opened, a train crew depot was established there and survived until 2 November 1953, when resources were concentrated at Hainault. Seven of the nine stabling sidings were taken out of use in January 1955, the other two in October 1969.

Photo: Brian T. Cooke

Although not strictly an extension, 23 November 1947 saw the opening of the new White City station we all know and love, with the consequent closure of Wood Lane station. Seven car trains could now operate. Some trains going to depot from the east now terminated at Shepherd's Bush.

On 29 November, the last steam train services ran over the Fairlop Loop. The 23.50 from Ilford to Woodford (hailed by N7 0-6-2T 9732) was specially cleaned and carried a Union flag. Loud cheers were given by a large crowd. The normal continual whistling and explosion of detonators associated with such events took place. The corresponding final train in the opposite direction, the 23.32 from Woodford (with N7 9645), also specially polished, hauled 10 coaches. At Ilford, 100 'dets' were exploded and the Station Master declared the line closed by breaking a bottle of ersatz champagne over the loco! From next day, an LT bus service operated between Woodford and Ilford via Hainault and other Loop stations. Roding Valley (then still a halt) had a special bus service.

14 December 1947 saw further extensions in the east, as 'tube' trains began running to and from Woodford and Newbury Park. At Woodford, the Central Line trains used the Down (eastbound) platform and the Up (westbound) bay for terminal purposes, the connecting steam trains onwards using the Up platform with the change-over engine having to stand on the Down line beyond the crossover at the Epping end of the station.



Left: The last day of regular steam at Woodford viewed from the temporary footbridge with the west end of a reversing Central Line train on the left and the terminating steam service behind.

Photo: D. Kelly

Below: Platform view of a similar scene looking east with a Central Line train waiting to depart westbound to Greenford and a steam service having arrived in platform 2. Note the temporary footbridge, removed after steam services ended, and the smoke deflectors on the cable gantry.



The Loop bus service henceforth only operated north of Newbury Park and connection to Ilford ended. Although passenger trains terminated at Newbury Park, the tracks were in situ for empty train access to and from Hainault depot. These operated via the north (Grange Hill) end of the

depôt, reversing in Grange Hill station. One four-car train was also provided to operate to and from Hainault dépôt for the conveyance of depot staff. Operating on Mondays to Fridays and Saturdays, this left Hainault depot for Newbury Park at 06.23 and Newbury Park for Hainault at 08.02. At this stage, the LT signalling at Hainault was not complete to allow passenger train working.

Eight-car trains were now introduced and six-car trains abolished. However, overcrowding was noted in a contemporary report, as the steam train service between 17.00 and 18.00 could carry 6,000 passengers, compared with less than 5,000 on the 'new' trains.

During the Monday to Friday midday off-peak, services were not self-contained, each train working in sequence Greenford – Liverpool Street – White City – Woodford – Ealing Broadway – Newbury Park – Greenford, with 46 seven-car trains in service. After the evening peak, 28 trains (23x7 and 5x8) provided self-contained services Greenford – Woodford and Ealing – Newbury Park, which were also the patterns on Saturday afternoon and evening and on Sundays, operating at the relevant intervals.

A reduction was also made in the number of trains running direct between Shepherd's Bush and Wood Lane depot, varying between 8 and 11 in each peak. Sunday services before 09.30 increased on western branches to 15, 5 minutes central area and 10 eastern branches. After 09.30, intervals on all branches were 10 minutes, with 5 minutes in the central area.

From 2 February 1948, peak services on the western branches improved to 4-6 minutes instead of 5-6 minutes, so that White City reversers were every 8 minutes in the peaks instead of every 6 minutes. Service pattern destinations in the peak through the central area were in this order: White City/Ealing/Greenford/Ealing/White City/Greenford/Ealing/Greenford, with 2-minute intervals through the central area. Reductions were made in the midday off-peak service, with 41 trains in service instead of 46. Self-contained services with regular Marble Arch reversers was introduced, with service patterns Greenford – Newbury Park, Ealing – Woodford and Marble Arch – Liverpool Street. Each service operated every 7½ minutes, giving a 2½-minute service in the central area between Marble Arch and Liverpool Street. Evening off-peak services were not self-contained, operating, in turn, Greenford – Woodford – Ealing – Newbury Park – Greenford.

On 31 May 1948, the Newbury Park branch service was extended to Hainault, with no trains stabling at Newbury Park. All trains to and from Hainault dépôt worked via Hainault station and not via Grange Hill, presumably in preparation for the forthcoming electrification of northern segment of the loop. Service frequencies generally increased.

21 November 1948 saw extensions open at both ends of the line: Woodford to Loughton and Hainault via Chigwell in the east, and Greenford to West Ruislip in the west.



Left: The service between Hainault and Woodford was a 'shuttle' between the two and a three-car train of Pre-1938 Tube Stock is seen departing Chigwell heading for Hainault, despite what is said on the rear destination plate! Underneath the starting signal is a yellow distant disc signal with black fishtail band, provided for main line freight trains which had reduced braking characteristics. The four Hainault-Woodford shuttle trains were given the set numbers 96-99 in the working timetables.

Photo: Don Thompson

The last steam service from Woodford northbound, the 00.56, nearly failed to run. The points had been disconnected and engineers were in charge. F5 2-4-2T 69203 became derailed with all wheels off the track. The Stratford BR breakdown train attended and the problem was "sorted", allowing F5 67202 to bring in the last Up train and N7 9624 to work the 00.56. Bus enthusiasts might be like to know that London Transport STD176 was on standby, in case the derailment was not dealt with in time.

The LNER steam service was now confined to east of Loughton, generally every 20 minutes (15 in peaks) to Epping and 60 (30-45 in peaks) to Ongar. A contemporary report states that Gresley Quint-Arts had been used on the Woodford – Ongar trains, but these had been displaced by 3-coach sets of what were termed as 'GE 'cattletrucks', hauled by F5s, for the penultimate stage of steam working.

LT battery locos L39 and 42 had brought the first Central Line trains to the new Loughton sidings to start-up the new service on 21 November.

West of London, the last Western Region Autotrain service to the Ruislip group of stations ran on Sunday 20 November, bringing to an end that kind of service to what was now the Central Line. The last train was the 23.03 Greenford branch 'Auto' from Ealing Broadway, which ran through to West Ruislip, connecting out of the Central Line trains at Greenford. The train consisted of 0-6-0PT 5421 and one autotrailer. Although the outward journey was quiet enough, the empty working back to Southall was marked at West Ruislip by the explosions of detonators and the sounding of the locomotive's whistle, to which cacophony was added blasts of the new LT signal box hooter!



Above: West Ruislip Central Line station, believed to be around the time of opening, with the new station far from complete – temporary signage adorn the platforms. The main line station, largely unaltered at that stage, can be seen in the background. The track in the foreground is No.23 Road which was planned to have a platform for terminating trains with trains to and from Denham using the island platform.

Most stock stabling at White City (which became a stabling point rather than a *depôt*) was transferred to Ruislip *depôt*. White City *depôt* now provided nine trains for service and was used only at the start and finish of traffic, all such trains running via White City station and no longer direct to/from Shepherd's Bush. Stabling of trains at Woodford was temporarily withdrawn until the Epping extension opened.

Peak service patterns at western end of the line improved, with White City reversers every 10 minutes instead of every 8 minutes. Peak pattern through the central area was thus: White City/Ealing/Greenford/Ealing/West Ruislip. Some trains starting and stabling at Hainault *depôt* via Grange Hill were introduced. Midday Monday to Friday off-peak services were self-contained: West Ruislip – Loughton, Ealing – Hainault and Liverpool Street – Marble Arch or White City.

Underground services commenced over the northern section of the Hainault loop (also referred to as the Roding Valley loop/line). This operated as a shuttle between Hainault and Woodford and

continued to do so (save for a few through trains) for decades. Service intervals between Hainault and Woodford at that time became a generous 10 minutes on a daily basis, with 7½ mins in the peaks. The trains were initially 3-car, changed the following year to four-car and the formation thence fluctuated over the years. This new pattern of service had disadvantages for operators and passengers. Passengers on the north side of the Loop now normally had to change at Hainault or Woodford. A shuttle emerging from its siding at Woodford had to cross the westbound line.

The service at the east end remained static for nearly a year, but was revised again as from 25 September 1949. On that date, the Central Line service was extended to Epping.

Existing service intervals over most of the line remained unchanged. Peak services to Epping ran every 10-15 minutes with additional short workings to Debden. Four trains entering and leaving service via the Grange Hill end of Hainault depôt and running in passenger service via Hainault were introduced. These departed Grange Hill at 06.00, 06.15, 06.54 and 07.05 and corresponding return workings arrived at Grange Hill at 19.11 (ex-White City), 19.52 (ex-Ealing), 00.09 and 00.29 (both ex-West Ruislip). Our Editor comments: *“One is led to wonder how these trains were indicated ‘through the road’, with no provision of a GRANGE HILL VIA HAINAULT description or destination plate.”* One can only assume they were advertised as to Hainault – travelling on to Grange Hill incognito!

On the electrified sections, only a limited through service was provided to Epping off-peak, with most trains terminating at Debden. Service intervals over the new section of line were approximately every 20 minutes, but only half the trains ran through between Epping and London. To provide the 20-minute frequency to Epping, an additional two-car shuttle (set 90) worked between Loughton and Epping, albeit with a change of train required for passengers to and from the south of Loughton. Contemporary reports say that use of the shuttle caused considerable overcrowding at week-ends and un-necessary changes of train. However, as far as Debden, the off-peak service was roughly twice that to Epping.

This new timetable provided for a completely separate Epping – Ongar service, operated on behalf of LT by BR (ER). This was much improved but did not always correspond with the main Central Line service. Most Ongar trains connected into and from the through London services, but the frequencies of the two services did not always match up: there were some frustrating and dubious connections – e.g. 11.17 arrival to 11.17½ departure Monday to Friday on one hand, to 20.57 arrival and 21.18 departure Saturdays on the other! There continued to be a gap in the Monday to Friday midday and Saturday service to Ongar, for the freight train to run.



Left: The interchange at Epping with the BR push-pull for Ongar on the left and Central Line train to London (and beyond) on the right, as seen from the footbridge.

The steam service between Epping and Ongar was normally operated by two-coach push-pull sets powered by Class F5 2-4-2Ts 67193, 67200/2/3. These also worked the nocturnal trains on the line from Liverpool Street and Stratford main line platforms, when the Central Line current was switched off. (This was probably the first time push-pull trains had regularly worked in and out of Liverpool Street main line station).

The single line was worked without tablet or trainstaff but utilised an electrical system to ensure only one train on the single-line sections at the time. Trains could pass at North Weald, but the system used at Ongar allowed for a more frequent peak service. The arriving train used the run-round loop (normally now not needed for passenger trains as they were push-pull), then over a cross-over, bringing it into the north end of the single platform, toward the buffers. The train waiting at the south end of the platform then departed for Epping. When passengers had left the incoming train, it moved down to the south end of the platform, clear of the cross-over, ready for the next departure, after the

next incoming train arrived. The F5 locomotives and some J15 0-6-0 tender locomotives, fitted with trip-cocks, were shedded at Epping for the local passenger and freight trains respectively.



Above: In the early years of the Central Line to Epping, there was an infrequent through service to London at off-peak times, the intervals varying between every 36 and 48 minutes according to the timetable pattern in operation over the rest of the line. However, at similar intervals was a one-train electric shuttle to and from Loughton, which is seen on the left, and the Ongar push-pull steam service on the right.

Further changes took place from 5 June 1950. These included withdrawal of the Grange Hill via Hainault trains that were introduced in WTT No.6. These trains now entered service via Hainault depôt road and shunting neck. The midday freight working to Ongar was withdrawn and in consequence both through train and shuttle services between Loughton and Epping were each improved to regular 36-minute intervals (i.e. 18 minutes combined), enabling better Ongar connections at Epping. The Loughton – Epping shuttle on Saturdays was increased from two to four cars.

All shuttle trains (Hainault – Woodford and Loughton – Epping) were reduced to three cars with effect from 3 November 1952, but the Loughton – Epping shuttle went down to two cars from 4 October 1954 and increased again to three cars from 29 October 1956!

Also effective 29 October 1956, the direct route from the Eastern Region in the Ilford area (formerly used by Fairlop Loop trains) was de-commissioned. Freight trains for the goods yards between Grange Hill and Newbury Park thenceforth had to run via Woodford

Apart from the trial of the ACV cars experimental diesel train in 1953, the Ongar line had resisted dieselisation, remaining steam operated literally until the last minute. However, from 18 November 1957, the Epping – Ongar section was electrified. Service interval was normally 20 minutes peak and 40 minutes off-peak, with some 48 minute intervals extreme off-peaks. The Loughton – Epping shuttles (which latterly had operated only on Saturday mornings between the peaks and all-day Sundays) were eliminated from the same date.

The Hainault – Woodford branch service was increased to every 16 minutes, to give better connections at Hainault, unlike M-F evenings, which remained at 24 minutes.

The subsequent history of both the Hainault – Woodford and Epping - Ongar shuttles is well-known, with the experiments and improvements to the former and the run-down and withdrawal of the latter.

The shuttle services were also of interest to those seeking interesting rolling stock, such as the 1935, and later the 1960 and 1967 Stocks.

These last extensions brought about a situation that remained fairly static for approximately eight years, with only detail alterations.

From September 1949, the operation of the entire line passed from BR Eastern Region to London Transport Railways, even though steam trains would still be running until 1957. Not long afterwards, it was reported that new protective fencing was being erected along the line from Epping.

As diesel locomotives were introduced in the London area, freight trains were taken over by that traction, mainly using the Class 15 locomotives. These locos also replaced steam on the occasional through excursion trains that continued to operate to such watering holes as Southend and along the South Coast. However, as with the case all over Britain, local freight trains were withdrawn from the east end of the Central Line. The nocturnal passenger trains from the main line stations were dieselised with DMUs by early 1958, but finally finished in 1970, when Leyton Branch Junction south of Leyton was taken up, preventing all through working of trains. In 1970-71 the yellow disc distant signals were decommissioned. Several of the areas which had signalling and ground frames for the goods yards (and the connection at Leyton) were converted to automatic working and the relevant signalling decommissioned.

At the west end of the line, Ruislip Gardens BR station closed in July 1958, having only opened in July 1934.

Things changed little at the western end, save that a reversing siding was provided west of Northolt, replacing the facility at Greenford and the cabin at the latter closed with effect from 1 May 1960.

From 17 June 1963, the Up main line platform at Greenford (main line station) was closed with the withdrawal of the unique remainder of the GWR/WR service along the Central Line (confirmed by our Editor who often viewed it from his school class-room!)

On 13 November 1967, the management of West Ruislip, Ruislip Gardens and Greenford stations was transferred from BR (WR) to LT, really bringing our story to its close.

The later history of the Central Line is fairly well-known but, even so, the service has not yet reached the 40 trains per hour envisaged in 1945!



Above: All of the stations on the western extensions of the Central Line had island platforms and (eventually) had concrete lighting stands and station name bullseye fittings. 'Butterfly' shaped canopies were also the order of the day. At Northolt (*Left*) the original main line station was on the opposite side of the Mandeville Road. At Perivale (*Right*), the new station was on the east side of Horsenden Lane and a westbound train is seen departing. Note on the right-hand track the two stopping marks (one for six-car and one for seven car trains). The eight-car mark was adjacent to where the photographer was standing and there was one further away for four-car trains.

Both photos: Alan A. Jackson

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