THE ONGAR SHUFFLE

by Eric Stuart

(In this article, I use 'east' and 'west' instead of 'down' or 'north' and 'up' or 'south', as the first terms are in current use).

Before London Transport took over the Ongar and Fairlop Loop lines, the service was operated by steam trains of eight and ten coaches, the latter consisting of two five-coach, articulated 'Quad-Arts'. (Aficionados of the Westinghouse brake will be glad to hear that, like the majority of the Great Eastern suburban system, these trains were 100% Westinghouse braked). All stations along the line could cope with trains of this length. There was double track as far as Epping, but the last section on to Ongar was single line: North Weald, Blake Hall and the terminus at Ongar had a single platform each.

Many trains reversed east to west at Epping, with about one train to Ongar every 40-60 minutes. There was a crossover toward the east end of Ongar platform, to release the arriving train-loco to run round and/or go for servicing. At that time, the Epping loco depot was open and there had even been a sub-shed at Ongar. One needs to be aware of these details of the layout, to appreciate what follows.

When electrification reached Epping on 25 September 1949, there was an eight-year period, during which steam trains continued to work the section to Ongar, as the expected dieselisation never happened.[1] To simplify the shuttle service, it was operated by two-coach Push-Pull trains, which the Eastern Region Working Timetable referred to as Rail Motors, so the loco no longer had to run round at the end of each trip. These trains were operated by British Railways on London Transport's behalf, because LT had taken over management of the stations to Ongar.

Although Epping has (and had) two platforms, the eastbound platform would normally be occupied by a reversing Central Line electric train, passengers crossing the footbridge to and from the connecting Ongar shuttle. There had been a long siding at North Weald, but this was altered to a passing loop, with a second platform added, in time for the new service.

Effectively, therefore, the layout was now a single line, with two single-platform termini and a passing loop roughly in the middle. Thus the maximum service that would seem possible was two trains, operating like a funicular, with trains leaving each end and passing at the intermediate station.

However, by dint of a comparatively simple change of signalling and points at Ongar, three levels of service would be possible. The most noticeable alteration was the removal of the cross-over at the east end of the platform and the placing of one in the middle of the platform. The three levels of service then possible were:

Level 1 – Train every 40-60 minutes. One train operating between Epping and Ongar on a single line, with the signal box at North Weald switched out and the loop out of use.

Level 2 – Train approx every 30 minutes. Two trains operating with the signal box and loop at North Weald in operation, the two trains passing there.

Level 3 – Trains at approx. 20-minute intervals. As Level 2, but with three trains in operation, involving two trains at Ongar at the same time.

Different systems of railway operations interest me and others may also be interested. I will describe how the Level 3 service worked as follows. For simplicity, I will refer to the three trains as Trains 1, 2 and 3.

Firstly, Train 1 leaves Epping. It proceeds to North Weald, where it crosses Train 2. Train 2 continues to Epping and Train 1 to Ongar. At Ongar, Train 1 enters the station by the former engine release line *(see photo page 44, Lower),* passing Train 3 waiting at the west end of the platform with departing passengers aboard. It moves over to the platform road at the crossover in the middle of the platform *(see photo page 45 Top Right)* and stops at the east end of the platform for passengers to get off. Both Trains 1 and 3 are now in the platform *(see photo page 45, Lower).* Now that the single line is clear, Train 3 can leave, passing Train 2 at North Weald, on its way back from Epping.

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[1] For details of this see *"A Routemaster on the Moon?!"* in *Underground News* No.632, pages 388-390.

Meanwhile, Train 1 moves along the platform to the west end, awaiting the arrival of Train 2, when Train 1 can leave for North Weald and Epping. And so on ... Simples!

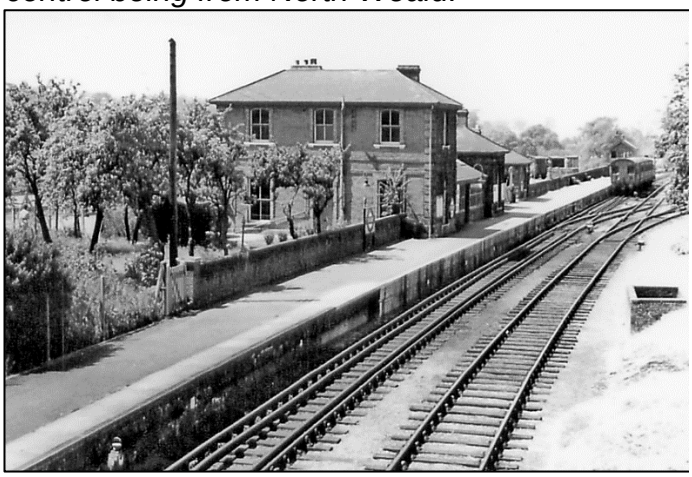
The three-train service operated for about 90 minutes in rush hours. Running time between Epping and Ongar was 17 or 18 minutes, which became 16 or 17 minutes in the 1950s.

***Above**: A general view of the station layout at Ongar from the buffer stops looking towards Epping and before electrification. The loop crossover can be seen midway along the platform, which would be used by arriving trains during the three-train service.*

***Below**: Looking towards Epping from the 'London' end of the single platform with the signal box to the left. Also in pre-electrification days, one of the push-pull shuttles approaches on the loop road, which will pass the departing train on the right and run via the crossover to the far end of the platform.*

Both photos: LURS Collection

***Opposite**: (Top) Two views of the arrangements at Ongar between September 1949 and November 1957. A departing train waits at the far (London) end of the platform (Left), while an arriving train crosses from the loop to the end of the platform (Right). Note that current rails are in situ just prior to electrification. The signal box here closed on 23 March 1969 and was subsequently demolished, control being from North Weald.*



***Above**: Two push-pull sets in the platform at Ongar, that nearest the camera awaiting departure for Epping. The train in the distance has just arrived, having run via the loop and across the crossover in the distance to the far end of the platform. After the nearest train has departed, it will then run forward to that position and await the arrival of the next push-pull set from Epping. Current rails are already in position for electric services.*

All photos: LURS Collection

The quick turn-rounds at each end of the line were aided by the fact that the single-line was controlled, not by the mechanical systems of train-staff or tablets which had to be exchanged at the end of each section, but by a track-circuiting system.[2]

[2] A similar system was used between Thorpe-le-Soken and Walton-on-the-Naze and, I assume, is similar to that used between Chalfont and Chesham and Finchley Central and Mill Hill East; but hopefully a signalling-qualified member can elaborate …

I would like to know whose this simple but ingenious concept was. As far as I know, it was and is unique, at least in the UK, although a variation of the idea is currently used on the Falmouth branch.

Whether or not the introduction of the diesel trains would have allowed speedier turn-rounds to achieve a 20-minute service with only two trains, I don't know, but it's academic, as the electrification of the line came about in 1957 and so this unusual system finished.

As stated in my earlier article, each night these trains were able to stretch their wheels. They worked a couple of trips to either Stratford or Liverpool Street and back, allowing current to be switched off for Engineering Hours. These trains were for staff use, but also available for ordinary passengers, with the proviso they already had tickets in some cases, where the Booking Offices were closed. In those days, there were many night workers in the east of London, who would have appreciated the trains. Come to think about it, I suppose this was the first "Night Tube" service – and it operated all week!

One query I have concerns the odd occasions when a loco fitted for working the Rail Motors in 'push' mode was not available. In such a case, the loco used had to run round at both termini. This could be difficult at busy times, as it could only be done at Epping when there was no Central Line train waiting in the eastbound platform. I suspect the timetable went to pieces and a two-train service had to operate! Perhaps one of our members knows?

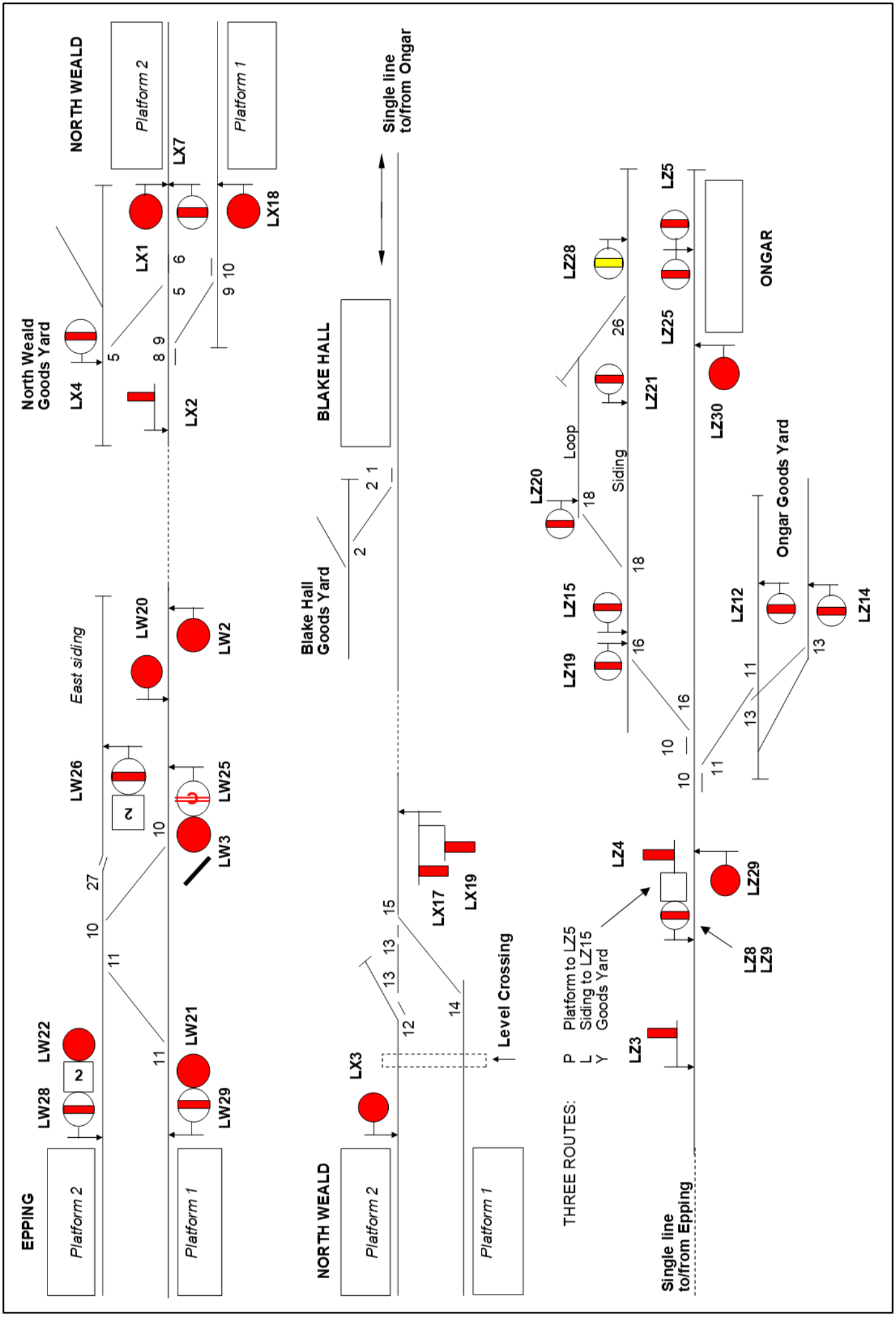
The introduction of the Green Belt around London after the Second World War rather hindered the completion of the Central Line aspects of the 1935 New Works Plan and the expected level of traffic on the Ongar line, as with other parts the Plan. Probably, London Transport would have been better to have let the Eastern Region introduce the dieselisation of the line, using the pool of DMUs at Stratford, rather than electrifying for a comparatively short life, because the service remained a shuttle, with no through trains to London. But I appreciate that view is debatable and it's easy to be wise after the event.

***Left**: Ongar in electric days, post 1963, which is from when the 1935 Stock was repainted silver, looking down from the embankment at the end of the line. The loop crossover has been removed and the loop has become a long siding.*

***Below**: 1935 Stock DM 11010 stands at the normal stopping mark at Ongar. Beyond the wooden boards behind the photographer was a berth for stabling a defective train, which was then a signalled move, in and out.*

Both photos: LURS Collection


WAY OUT


EPPING
Platform 2
Platform 1
LW28
LW22
LW21
LW29
LW26
East siding
LW20
LW2
LW3
LW25
NORTH WEALD
Platform 2
Platform 1
LX7
LX18
LX1
LX2
LX4
North Weald Goods Yard
Single line to/from Ongar
BLAKE HALL
Blake Hall Goods Yard
LX3
LX17
LX19
Level Crossing
NORTH WEALD
Platform 2
Platform 1
THREE ROUTES:
P Platform to LZ5
L Siding to LZ15
Y Goods Yard
LZ3
LZ4
LZ8
LZ9
LZ29
LZ20
LZ19
LZ15
Loop
Siding
LZ28
LZ21
LZ12
Ongar Goods Yard
LZ14
LZ25
LZ5
LZ30
ONGAR
Single line to/from Epping

***Opposite**: Signalling and track plan of the Epping – Ongar line as it was from electrification on 18 November 1957.*

***Above**: An undated view at North Weald but certainly pre-1949 and before the loop platform was built. The track to the left was a long siding and it wasn't possible for trains to be 'looped' here.*

***Left**: In the closing days of steam push-pull working between Epping and Ongar, two trains pass at North Weald, with current rails already in position. Steam working ended on 16 November and the following day, the signalling was changed to adapt for electric train working after which, trial running took place. Public services with electric trains between Epping and Ongar began on Monday 18 November 1957.*

***Left**: The steam push-pull from Ongar is in platform 1 at Epping on the right, while one of the Loughton shuttles composed of Pre-1938 Tube Stock waits in platform 2 – this complimented a then sparse through off-peak Central Line service to and from London. The quality of booked connections between the two shuttle services was variable, to say the least. The need for the Loughton shuttle reduced as traffic increased.*

All photos: LURS Collection

Two views of the railbus experiments of the early-1950s at Ongar (Above) and Epping (Right).

Photos: Basil Hancock Collection

***Below**: Connecting at Epping. Two views of the Ongar steam shuttle at Epping, connecting into and from Central Line trains. Passengers alight from an arriving train (Left) and have to cross the footbridge to continue into central London – the Central Line train is waiting in platform 2 on the right with part of a 1927 MCCW control trailer visible. Wheezing steam, the push-pull shuttle stands in platform 1 with a Central Line train to the left, showing part of a 1923 Birmingham trailer and part of a 1924 MCCW motor car. The water column to replenish the steam locos is on the right.*

Photos: Ben Brooksbank (Left) and LURS Collection (Right)

***Left**: A two-car unit of 1935 Experimental Tube Stock at Ongar in the very early days of electric services. The train has stopped short of the overrun section (see diagram) which was provided to stable a defective unit if necessary. Note at the bottom left, the severed remains of the points, which were used by steam trains to run up to the far end.*

Photo: LURS Collection

***Above**: Connections at Epping in the 'silver' era, with a train of 1935 Experimental Tube Stock having arrived in platform 1 from Ongar, while a 1962 Tube Stock awaits departure for London and the west on the left. In front of the train are the gaps in the current rails for coupling and uncoupling. The water column provided on the platform for steam trains has long since been removed, even though freight as still operating (just) but diesel hauled.*

***Above**: The Experimental 1935 Tube Stock was repainted from red to 'silver' in 1963 (two units) and 1965 (one unit), the latter being later because of it having reduced mileage with it being on test train duties for a few years. Seen at Ongar and waiting departure for Epping, it will be noted that by now, LT bullseye signs are in place, unlike when the line was first electrified (see photo, previous page, lower).*

Both photos: LURS Collection