

COMPUTER BASED TRAIN CONTROL COMMISSIONING REACHES ALL SUB-SURFACE TRAINS AND CREWS

by John Hawkins

Despite continued reliability problems since commissioning of SMA1 and SMA2 on 31 August 2019, for which at least 13 areas of improvement are being pursued, some of which cannot be implemented before the "Spring", SMA3 including the Aldgate area is still planned for commissioning on the weekend of 22 February 2020 after a final proving weekend on 18/19 January¹. However, planned enhanced timetables have been postponed for now. I suspect the commissioning is because east-end District Line staff will be due for another round of refresher training if there is further delay.

District Line trains on the main line will encounter this new signalling for the first time between Monument and Stepney Green, only a nine-minute run, to allow their drivers to become familiar with the new system.

Metropolitan Line trains will operate under the new signalling from Finchley Road to Aldgate and back, nearly an hour including reversal time, or half an Uxbridge trip, whilst Circle Line trains will operate under the new signalling from Monument all the way to Hammersmith and back, and H&C trains from Stepney Green, around 1 hour 45 including reversal, near two-thirds of a round trip for either.

Some interesting new moves are introduced with the new signalling. When King's Cross scissors crossover was commissioned west of the station, it allowed inner rail reversing moves from a berth just beyond the pointwork. SMA3 also commissions a similar reversing berth on the outer rail, together with reversing moves from either Euston Square platform back to King's Cross outer rail.

New reversing berths at Moorgate allow outer rail trains from Barbican to reverse in the inner rail platform at Moorgate as well as in the two bay roads. Also, inner rail trains can reverse back to the outer rail from a new reversing berth on the outer rail clear of the crossover, as well as from the current adjacent inner rail reversing berth. These reversing berths can also be reached from the bay roads and allow movement back into the bay roads as well as to both through platforms.

At Tower Hill, the new pointwork is commissioned at the eastern end of the former bay road to permit through running and reversal from either direction. New reversing berths are also commissioned on the running lines beyond the outer platforms to allow trains to reverse back through the central road. The new signalling provides for emergency reversing of an empty S8 train from Aldgate in the westbound line reversing berth. I would hope that the middle road will be used as an eastbound road at times when the original narrow platform is crowded. I would not be surprised to see a Night Tube Circle Line service from Hammersmith eventually reversing back to Aldgate in the middle road to provide a link with any future District Line service without duplicating it.

The emergency crossover at Aldgate East is decommissioned, whilst at Whitechapel, a new westbound reversing berth is commissioned in the vicinity of St. Mary's disused platform for reversing back to the eastbound platform. The current eastbound reversing berth east of the station provides for reversing back into the westbound platform. S8 stopping marks are provided in case empty stock transfers to and from Upminster wheel lathe are involved in emergency reversing.

All new signalling is controlled from Hammersmith Signal Control Centre. This sees the end of Whitechapel cabin, which once also controlled the East London line to Shoreditch and connections at St Mary's.

I see from Mike Horne's summary of LU signal cabins that the Whitechapel box dates from 1907. It was built into the north wall and vaults with some structure at the front at the west of the platforms and replaced the former east and west boxes. However, in 1951, the current frame was installed, believed to be part of the frame originally intended for Edgware and the Northern Heights extensions.

SMA3 was said to enable 28tph peak service on the north side of the Circle Line, planned for the March 2020 timetables, but now postponed. 30tph on both sides of the Circle line was planned for December 2020 and requires completion of the Circle Line resignalling in addition to the line to Barking. This requires commissioning of SMA 4, 5 and 6 which will require some recovery in the programme.

¹ As this issue closed for press, we learnt that the commissioning of SMA3 and SMA4 have both been delayed, with no new date for either yet forthcoming.