

THE END OF 'S' SIGNALS ON THE UNDERGROUND

With stage V of the Northern Line signalling upgrade taking place from 22 March 2014, the conventional automatic signals prefixed 'S' on the London Underground became history. The following notes (*with grateful thanks to Mike Horne*) summarise what is believed to be the situation, although other signalling experts may wish to expand on these notes.

The first automatic signalling anywhere on the Underground was on the Ealing & South Harrow line. As far as can be seen from a descriptive booklet about this system, all the signals were those initially installed with mechanical control intended and Westinghouse merely fitted air-operated actuators on the posts and coupled them up with the existing rodding.

Of the two plans seen of the signalling as originally installed, none of the signals were numbered, and neither is a number borne by one of the signals of which an early photo has been seen. This is *not* conclusive proof they were not numbered, but it does create some uncertainty. A 1905 plan shows these signals to have received a number, but in a series S600 and upwards (the signal locations do not appear to have moved). This was not what would be expected from the first set of signals to be numbered, and it is thought it is entirely possible they weren't.

The old-fashioned titling of 'home' and 'starting' signals would have had to do, though it can't be seen why with so few signals there could have been confusion. More investigation is thus needed.

There is no doubt that the District prefixed their automatic signals with an 'S' from the very start of the installation along the main section of line in 1905-06¹. However, the signals are numbered with three digits, the initial one signifying the section of line on which installed. It is not possible to establish the first one by its number.

It would take some more work to identify the very first fully automatic signal to come into use, but plans indicate that signalling along the whole railway was planned well in advance of the first one going live, so the actual first signal is perhaps not very important. The Metropolitan Railway and tube lines followed the same practice.

It is believed that the change to using 'A' instead of 'S' for automatic signal recognition (and 'R' instead of 'RS' for repeaters) was an industry-led initiative. The Metropolitan seems to have been first to adopt it in July 1930, when new signalling between Uxbridge and Ruislip came into service. It cannot be said positively that this was their first use, but they were still using 'S' in 1927 and it is suspected that it was the first. (*There is a slight possibility of a signal at Westbourne Park being numbered 'A' earlier, but the evidence is slight and lacks any definite source*).

They used 'A' thereafter where significant new signalling came into use. As far as can be ascertained the first use of the letter 'A' on the Underground Group lines was from 17 May 1931, during resignalling between Earl's Court and Barons Court. Subsequent resignalling followed this pattern.

There is a plausible suggestion that LT avoided wholesale re-prefixing of signals from 'S' to 'A' until areas were modernised, as the 'S' prefix was a handy way to identify some earlier circuitry. Whether true (and what the circuitry was) isn't known, but it would explain why few signals were re-lettered other than when resignalling schemes took place.

In times past, where there was a combined stop and repeater signal, the repeater showed yellow even if the main 'stop' signal above it showed red. Presumably as a result of an incident of some kind, the conversion of such repeater signals for the yellow aspect to be extinguished when main signal on same post showed red, took place from 26 May 1937, as noted in Traffic Circular 24/37. The entry also stated that other similar signals would be converted "from time to time". This was indeed a slow process and although some conversions were done during the Second World War, the programme gathered pace afterwards, but it still appears to have taken until September 1953 to complete.

¹ *Looking through the Traffic Notices for the District Railway, the first references to numbered automatic signals are between Mill Hill Park and Hounslow from 11 June 1905. Ed.*

The first use of a disc “Calling-On” signal is recorded as being at South Harrow from 7 August 1932 (then said that it “will become the future standard in open sections”). Similarly, the first disc “Warning” signal is believed to have been in use at Northfields from 18 December 1932. The first use of a “junction route indicator” (three white lights on a diverging route) was approaching Finchley Road northbound Metropolitan Line (MD23^{H/L}) from 5 September 1937.
