

REPORT OF SOCIETY MEETING

THE NOT-SO-STANDARD 'STANDARD' STOCK

by Brian Hardy

A report of the LURS meeting at All Souls Club House
on Tuesday 10 February 2015

The February 2015 Society meeting was a presentation by about the Underground's Pre-1938 Tube Stock, also known as the 'Standard Tube Stock', although not all of it was indeed standard which precluded some types working with others. However, the object of the meeting was to look at the reasons for it, the visual differences between the many batches, where they worked and their eventual demise. Brian explained that he 'grew up' with the Standard Stock and had both the Piccadilly and Central lines nearby home. Even at an early age he realised that the Central Line trains were generally older-looking than those on the Piccadilly and it was back then, in the early-1950s, that the interest began to develop. It was only some years later that he realised that there were so many cars, so many different batches, and so many detail differences for what he learnt to be 'Standard' Stock.

Before going into detail, it was necessary to first look at the 1920 Cammell Laird Tube Stock. It wasn't technically part of the Standard Stock fleet but it was numbered in the Standard Stock series by London Transport, and for some eight years during the 1930s, they did operate *with* Standard Stock motor cars. Moreover, it was the first production air door stock on the deep level tube lines. Comprising 20 control trailers and 20 trailers, we saw the cars when new in original condition in Derby red livery but soon they became red and cream. Of the 20 French-built Piccadilly Line motor cars converted to work with them, two were converted by Cammell Laird and had the wide 'post' between the double doors, whereas the others were converted by Gloucester, two with doors that slid back on the outside of the body and the remaining 16 with the doors sliding back into 'pockets'.

New innovations on the Cammell Laird cars included oval-shaped cab windows (on the control trailer cars), outside door indicator lights, a flapper indicator exposed when the doors were open (which had a tendency to break), and sensitive door edges (which, back then, were a complete failure). The drab interiors resulted in a revamped interior on one car soon after entering service and in the early-1930s were given a proper refurbishment to match, as far as possible, the Pre-1938 Tube Stock – light fittings, seating moquette, transverse seats in the centre bays maple wood flooring and inward-opening communicating doors at the car ends (instead of twin sliding doors). Their transfer to the Bakerloo Line in the early-1930s was short lived, as they were withdrawn from late-1938. It was intended that 16 would be adapted for use on the Northern City Line once the New Works Programme had been completed, but this was not to be and all 40 cars were stored during the Second World War. After, all but five were scrapped with the remaining five being converted into an Instruction Train. We were shown photos of this conversion, along with photos of the other cars in the scrapyards at Chesterfield.

We then turned to the Standard Stock – why it was needed and how it developed. A wooden mock-up was built in Golders Green depot in 1921. One of the cab windows was oval, so the limited driver's view through it hadn't then been fully appreciated. Interestingly, the cab window adopted was the one with its gentle arch at the top, which was to be a feature on the cabs of both tube and sub-surface trains built in the 1920s and early-1930s.

It was noted that there were:

6 Car builders:		1,466 cars in total:
• Met. Carriage / Metropolitan Cammell	851 cars	• 645 Driving Motor cars
• U.C.C. (Feltham)	241 cars	• 551 Trailers
• Birmingham	176 cars	• 270 Control Trailers
• Cammell Laird	155 cars	15 Batches
• Gloucester	42 cars	
• Leeds Forge	1 car	

The lion's share of the building went to Met. Carriage / Metropolitan Cammell but the Leeds Forge Company built just one (Sample) car.

Brian then went on to describe the different batches, the reasons for them and the detail differences between them. Even a 'batch' of cars built by different car builders had detail differences between

them. As well as the Hampstead and City stocks, the original plan was to trial air-door conversions on Gate Stock but these weren't satisfactory and decisions were taken to replace them with new stock, which is why the Piccadilly and Bakerloo were later recipients of the new trains too. The different orders may be summarised thus:

Date	For	Builder	DM	T	CT	Total	Grand Total
1922	Competition or 'Sample' Stock	Gloucester	–	1	1		
		Leeds Forge	–	1	–		
		Met. Carriage	–	1	–		
		Birmingham	–	1	–		
		Cammell Laird	–	1	–	6	6
1923	C&SLR replacement and Edgware extension stock †	Cammell Laird	41	40			
		Met. Carriage	40	–	35		
		Birmingham	–	35	–	191	197
1924	Kennington and Morden extension stock	Cammell Laird	–	–	25		
		Met. Carriage	52	–	–		
		Birmingham	–	50	–	127	324
1925	Kennington and Morden additional stock (1), Hampstead additional stock (2) and cover for CLR air door conversions (3) ‡	Cammell Laird	48	–	–		
		Met. Carriage	–	5	67	120	444
1926	Hampstead additional stock	Met. Carriage	64	48	–	112	556
Date	For	Builder	DM	T	CT	Total	Grand Total
1927	Hampstead Gate Stock replacement (1) and Piccadilly Gate Stock replacement (2)	Met. Carriage	110	160	36	306	862
1928	Bakerloo Gate Stock replacement	UCC (Feltham)	57	37	68	162	1024
1928	French air-door motor car replacement	UCC (Feltham)	20	–	–	20	1044
1929	Hampstead additional stock *	UCC (Feltham)	18	17	18	53	1097
1930	Piccadilly experimental stock	UCC (Feltham)	2	4	–	6	1103
1930	Watford Replacement Stock	Met. Carriage	22	20	20	62	1165
1931	Piccadilly extension stock	Met. Cammell	145	–	–		
		Birmingham	–	90	–		
		Gloucester	–	40	–	275	1440
1934	Piccadilly additional stock	Met. Cammell	26	–	–	26	1466

† The Competition stock was also considered part of this batch.

‡ The cover was provided by loaning two trains of Piccadilly Cammell Laird air-door stock for a year.

* Being fitted with e.p. brakes, this stock ran on the Piccadilly with earlier stock transferred to the Hampstead.

Having been told that the Standard Stock had operated on all 'tube' lines during its lifetime, its 'firsts' and 'lasts' were summarised as follows:

Hampstead & City – January 1923 to May 1942	
Piccadilly – March 1929 to July 1964	† '58 Trailers' in 1938 Stock until June 1974.
Bakerloo – July 1929 to May 1949 †	* District west end shuttles.
District – February to July 1932 *	‡ In 1935 Stock until December 1966 and in 1960 Stock until 1982.
Central – October 1938 to December 1963 ‡	§ Stanmore – Wembley Park shuttle.
Metropolitan – March 1939 to August 1939 §	
Northern City – May 1939 to November 1966	



Above: Edgware depot, Hampstead & City Line, in 1925 with trains of Standard Stock and (on roads 5 and 6) Gate Stock. When the Morden extension opened in 1926 Gate Stock was relegated to 'tunnel' work and was not scheduled to work north of Golders Green.

Photo: London Transport Museum

Standard Stock in depots and sidings was then featured, including a line-up of trains in Golders Green depot in 1937, many cars in Northfields depot at the west end in the late-1940s and three newly-delivered motor cars in isolation in Morden depot before the main sheds were built. This was followed by various cars involved in experiments and trials, such as the Frigidaire cooling trials in 1935, automatic coupler experiments, nine-car train operation, sleet tenders working with motor cars, and the conversion of trailers to work with the 1935 and 1960 Stocks.

There were several photographs shown of 'damaged' Standard Stock, from the one written off after a fire/collision near Eastcote in 1941, the two cars severely damaged in the Stratford collision, and 'burn-outs' – one from the Northern City and the car involved at Redbridge in 1960. This led us neatly into the withdrawal of the stock on London Transport, its scrapping, some serving in the engineering fleet, and some working for another 20 years on the Isle of Wight.

As most of the photos shown were in black and white, the presentation concluded with a selection of colour views of the stock in the post-war period.

The 'packed house' showed their appreciation to Brian in the usual manner.

Subsequent to the meeting, the question was asked as to when the term 'Standard Stock' first became to get used – at the time of ordering, upon delivery, or much later?

The answer is really that "Standard Stock" was always thus. The B Stock on the District was referred to as "Standard Wooden Stock" and the Gate Stock was called "Standard Stock" on drawings seen at the Museum which are dated 1920. The name is believed to have originated in the United States. They had a "Standard Stock" on the New York Subway.



Above: With the District and Piccadilly being able to share each other's tracks as far as Hammersmith from July 1932, protection had to be provided for the tube tunnels east of Barons Court, in case a District Line train got misrouted onto the Piccadilly and carried on. This was the first instance of the three mercury tubes protection where a 'tube' train would pass underneath but a sub-surface train would not, smashing the tubes, returning signals to danger, tripping and stopping the offending train. Here an eastbound train is seen east of Hammersmith demonstrates, headed by a 1929 Feltham motor car. The non-stop plate means omitting quieter stations on the way and not a non-stop run from Hammersmith to Finsbury Park! The Piccadilly had a complex pattern of non-stop, or skip-stop, operation, which was finally abolished in 1947. On the deep tube lines, non-stopping achieved very little, apart from annoying passengers who wanted stations the train wasn't stopping at and, of course, annoying the passengers waiting on the platform that was being non-stopped! Furthermore, the chances were that you caught up with the train in front – there was definitely no provision for overtaking!

Photo: London Transport Museum

EXPERIMENTS

During the meeting some of the experiments that were carried out on the Pre-1938 Tube Stock were described. One such was the thorny issue of passenger door control, disconnected on trains that had it at the beginning of the Second World War, and resurrected after. Not all lines operated with it and those that did were confined to it being used at open-air stations. For the Standard Stock, only the Central Line operated with it, beginning on 25 October 1948 and only then –

Section

Leyton – Theydon Bois
 Newbury Park – Roding Valley
 White City
 East Acton – Ruislip Gardens
 West Acton

Exceptions

Hainault all trains
 Debden, Loughton, Woodford, Newbury Park
 White City during peak hours
 Greenford and Ruislip Gardens terminating trains

With so many 'ifs' and 'buts' to its use, passengers quite understandably got confused – and over carried – and after a relatively short existence it was abolished (on all lines) on 16 March 1959. The system is being demonstrated (*Below*) on a Standard Stock car in October 1948.

Photo: LT Museum



Overleaf: After it was decided that the number of Control Trailers exceeded those actually required, some of them were converted to trailers. This was done in 1939-40, with more done after the war. The equipment was removed and used elsewhere, but essentially they continued to 'look' like Control Trailers. However, in 1955-57, 70 of them were further modified so that the former cab area was opened up to passengers and were given two opposite pairs of longitudinal seats in the former cab. Because it was rather cosy in there, they were called 'lovers' seats'. A Control Trailer with its cab equipment removed is seen at Acton Town (*Overleaf, Top Left*) on 16 February 1952 but still has its head/tail light fittings and destination box. One of the 'demobbed' Control Trailers at East Acton on 31 March 1962 (*Left, Lower*) shows that the head/tail lights have been shuttered over and the destination box removed. Inside a 'demobbed' Control Trailer (*Below Right*) looking towards the former cab with passengers occupying the 'lovers' seats'.

Photos: Alan Cross (Top Left), John Gillham (Lower Left) and London Transport Museum (Below)



Left: One of the less successful experiments was with Sleet Tenders, two of which were built at Acton Works in 1957 and trialled at Northfields on the Piccadilly Line. It was a reasonable compromise between having dedicated sleet locomotives or passenger trains fitted with de-icing equipment. However, it wasn't successful, mainly because the tender had to be pushed in front of the train, which caused problems with the 'tight' location of track circuits, block joints and trainstops, which would have been prohibitively expensive to alter. The two sleet tenders were scrapped in October 1960.

Photo: London Transport Museum