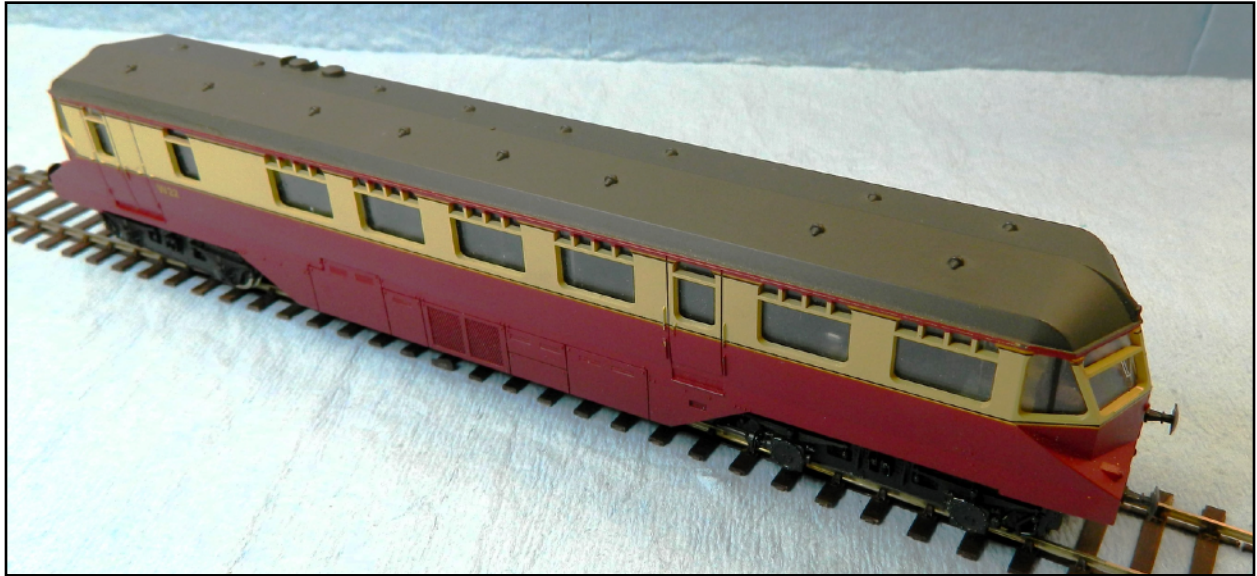


8. Nigel Phillips' "Chippy Flyer"



One of my first memories is of my mother with me in the pram going to see her mother in north Oxfordshire in the UK in 1951 on a diesel railcar. Only a distance of six miles, but I distinctly remember watching the trees flash by at what must have been a giddy 25 mph. The line was the old Banbury and Cheltenham District Railway, built in the 1870s. The diesel railcar was originally a Great Western Railway (GWR) car and in 1951 would have been in British Rail colors following the nationalization of the railways in 1947. The line closed to passenger traffic in 1951.

Built by the GWR at Swindon, Wiltshire, in 1939-1940, they were equipped with 2 diagonally opposed, 4-stroke 6-cylinder high-speed diesel engines with direct fuel injection, Ricardo-designed heads, and water-cooled dry sumps. The engines were made by The Associated Equipment Company (AEC) in Ealing, Middlesex. AEC had considerable experience in building these engines for road trucks, military, and bus use in the 1930s. Hydraulic clutches and preselector 5-speed transmissions were used, and each engine powered one truck via Cardan shafts connecting the clutch to the gearbox and then to the truck. SKF roller bearings from Sweden on the axles decreased rolling resistance. A rigid second drive shaft from the inboard axle powered the outboard axle. GWR built the chassis, wooden body, and interior, and AEC supplied the diesel engines and transmission components. Originally a B-B design, by the end of WW2 they were reduced to one engine and driven truck due to a shortage of SKF axle roller bearings, which were made in Sweden and during the war exported only to Germany. Similar problems were had with the Bosch-supplied compressor for the pneumatic controls. They ran like this until British Rail retired them in the early 1960s. One is running on a heritage railway (The Great Western Society, Didcot, Oxfordshire).

British Rail painted its passenger car stock in Crimson Lake and Cream (“Blood and Custard”) between 1949 and 1957. The Lima Crimson Lake and Cream model I’m working on dates to the 1970s and has a ring field motor and a gauge of 16.5mm but a 4mm scale body. An anachronism that is unfortunately firmly entrenched today in UK model railways. I have regauged it from 16.5mm to 18.2mm (EM gauge, close to the correct gauge of 18.83mm for 4mm scale). I added electrical pick-up on all wheels, and it’s been converted to DCC sound with an ESU decoder and a custom sound suite. The model has driving cabs at either end, a passenger compartment (smoker and non-smoker sections,) and a luggage/freight/heating boiler compartment (in which the motor and gears are located). I have a set of flush-fitting windows and that is the next job to do.

Lima, Hornby (who now own Lima), and Dapol have produced RTR models in 4mm scale/OO gauge, and brass etches are available from Worsley Works (worsleyworks.com) for those who like a challenge. The Lima model I have is a third-generation GWR diesel railcar, the first two generations had more streamlined bodies. The book “Great Western Diesel Railcars” by J.H. Russell (Wild Swan Publications, ISBN 0-906867 30 4, 1985) gives details of the development of the GWR diesel railcars.

Nigel Phillips