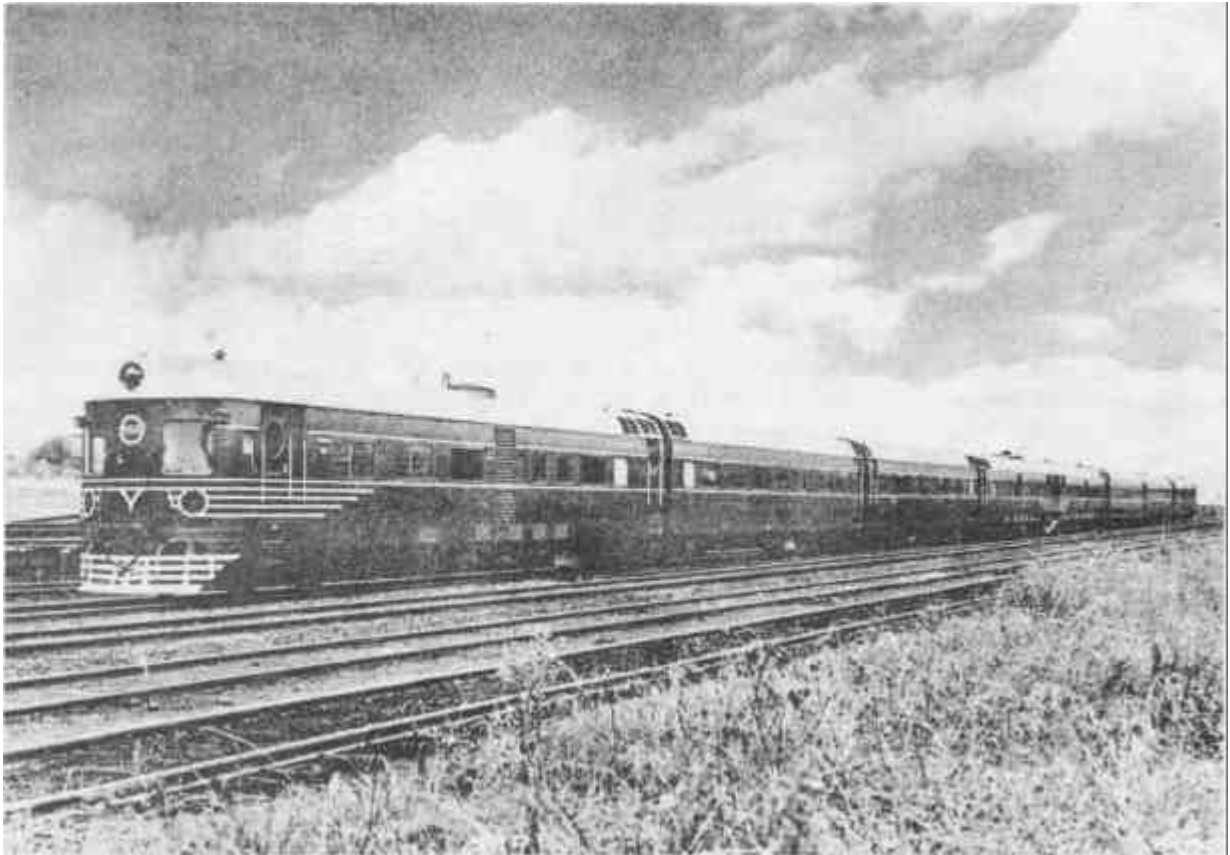


New South Wales Government Railways

(828)



THE CANBERRA-MONARO EXPRESS

This air-conditioned diesel train, which was placed in service on 9th May, 1955, consists of two four-car units that leave Sydney as an eight-car train at 7.35 a.m., Mondays to Saturdays. Upon arrival at Queanbeyan the two units are separated, one travelling to Canberra and the other to Cooma. After a stay of over four hours at Canberra and 40 minutes at Cooma these units return to Queanbeyan where they are again formed into an eight-car train that arrives in Sydney at 9.19 p.m.

Each four-car train consists of two power cars and two trailer cars, a power car being placed at each end. Two inclined type General Motors Diesel Engines Model 62802 of 250 horse power each at 1,800 r.p.m., coupled to 'Allison' Torque Converters, Model TCLA.965, are fitted to the underframe of each power car. Each engine has six cylinders.

Transmission is effected through a propellor shaft from each torque converter to bevel gears mounted on the driving axle of each bogie.

The engine radiators are mounted vertically in each side of the power cars, the air being drawn across them and up through vertical ducts by thermostatically controlled fans situated immediately above in the roof.

Power supply is 24 volt D.C. for control equipment. This power is provided by two belt driven 2.4 K.W. 24 volt and two directly driven 22 K.W. 120 volt generators mounted on each power car.

The engines provide a total of 1,000 horse power, 890 being for traction purposes and 110 for the auxiliary equipment.

A buffet is incorporated in one of the trailer cars from which light meals and refreshments are served to passengers during the journey; tables that can be set up in front of the seats are provided. Iced water containers and paper cups are installed in the vestibules of the cars.

Another modern feature is a public address system that is fitted throughout the cars.

Accommodation is provided for 153 passengers in each four-car unit, 90 first-class seats being in the two trailer cars and 63 second-class seats in the two power cars. All seats are similar to the comfortable ones installed in the air-conditioned daylight expresses; the first-class seats may be rotated and reclined; the second-class seats are the turn-over type. Smoking and non-smoking accommodation is available in both classes.

All walls of the cars above sill level are painted with cream gloss enamel and the ceilings are painted with ivory semi-flat enamel. Below sill level the finish is a coated fabric that is green in the first-class cars and maroon in the second-class cars.

The exterior wells of the cars are painted with red enamel relieved with two chrome yellow lines, and the roof is in light grey enamel.

These two four-car trains have been built in the Department's workshops. The underframes and the body trusses are made of steel, and aluminium alloy has been used for the body and roof framing and the interior and exterior sheathing.

Each power car is fitted with a driver's compartment to enable the train to be controlled from either end. The driving controls are electric; brake controls are electro-pneumatic and enable coupled multiple units to be controlled by one driver. A safety device in the form of a dead man's handle is also fitted in the driver's cabin.

Longitudinal luggage racks extending the full length of the saloons are built into the body sides. These are fabricated from aluminium alloy. Interior partitions and doors are of 13/16" resin-bonded plywood.

The floors are made up of 16 gauge aluminium alloy sheet covering the whole of the underframe upon which timber floor bearers are bolted to support the 13/16" plywood flooring. Linoleum is laid over the plywood. The floor under the plywood, body sides, and the roof are insulated with kapok material.

All side windows are double glazed, set in rubber channels, and fitted with Silica Gel crystals in containers, to prevent frosting of the windows.

The cars follow the modern trend and are air-conditioned for passenger comfort, the condenser and conditioner units being located above the ceiling at the end of each car; the conditioned air is conveyed along ducts in the car ceilings and delivered through anemostats to the passenger saloons.

The compressor units are mounted on the underframe of the trailer cars and in the control cabinets situated in the end vestibule of the power cars.

Weight of each four-car unit when empty is 122 tons 6 cwt., and 140 tons when loaded.

The overall length of each four-car unit is 248 feet 7 inches, each power car being 61 feet 3 inches and each trailer car 58 feet 6 inches. Each car is 9 feet 9 inches wide.

A luggage compartment at the rear of one power car in each unit will hold five tons of luggage and parcels.

