

TOWARDS AN AERODYNAMICALLY NEUTRAL PANTOGRAPH

One of the fundamental factors affecting the quality of current collection of a pantograph is the mean contact force between the pantograph head and the overhead wire.

In order to maintain a substantially uniform mean force with increasing speed, the aerodynamic behaviour of the pantograph and its effect on the contact force must be taken into consideration, and many administrations throughout the world are becoming aware of the need for pantograph aerodynamic studies.

This report outlines the historical development, and goes on to describe in detail the work done on BR, with particular reference to the BR/Brecknell, Willis 'Highspeed' pantograph.