

A THEORETICAL STUDY OF METHODS FOR IMPROVING THE PERFORMANCE OF THE BR/BW HIGHSPEED PANTOGRAPH

This report studies some theoretical methods of improving the performance of the BR/Brecknell Willis 'Highspeed' pantograph in order to allow two-pantograph current collection at speeds higher than 125 mile/h. A substantial reduction on head mass using a servo-control system could raise this speed to over 160 mile/h, but would be complex and possibly infeasible in practice.

A simpler frame servo-control would produce some improvement, but it is concluded that this may be insufficient to raise the operating speed sufficiently.