

A STUDY OF THE BR/BRECKNELL WILLIS 'HIGHSPEED' PANTOGRAPH ON GRADIENTS IN SAGGED SIMPLE EQUIPMENT.

The report details experiments carried out to demonstrate the performance of the BR/Brecknell Willis 'Highspeed' pantograph on overhead line gradients. A simple extension of theoretical prediction methods is shown to give fairly good agreement with the results, enabling other combinations of pantograph and gradient to be assessed.

It is suggested that performance on down gradients may be improved by increasing the design sag, but excessive registration arm uplifts are caused by poor aerodynamics at high wire height. It was also concluded that simplification of the BR/BW pantograph pneumatic suspension may be possible.