

COMPUTER SIMULATION OF THE TRACTION SYSTEMS USED IN THE CLASS 47 SEPEX ADHESION TRIALS

The report describes the use of computer modelling to predict locomotive performance under poor adhesion conditions. Trials were undertaken with a Class 47 locomotive modified to give separately excited traction motor fields. The results are presented and compared with those from Sepex Modified and Standard locomotive trials, which were previously conducted.

The report also discusses the limitations of the model, along with the performance of the separately excited motor locomotive and various control schemes, with regard to the utilisation of available adhesion.

Recommendations are proposed for the future use of modelling in the development and evaluation of novel locomotive systems.