

ELECTRO-MECHANICAL ACTUATOR FOR TILTING THE ADVANCED PASSENGER TRAIN

This report describes the specification and design of an electrical alternative for the existing hydraulic tilt system used on the APT.

It has been established in principle that an electro-mechanical actuator can be used for tilting the APT and that the benefits in both capital and running costs could be significant. Two prototype actuators are due to be delivered shortly, and these will be tested on the POP train both statically and on the track. Assuming they meet their performance requirements one or both will then be transferred to an endurance rig for life testing.