St Albans & District Model Engineering Society

Dynamometer Project

26th June 2019, 10:00 at 12 New Barnes Avenue

Attendees	Ian Gurton, Clive Reynolds, David Brown, Mike Collins
Agenda	 Review progress with the electronics and software Confirm the work required on the coach and decide on actions to progress
Updates	I. Ian had been in touch with other clubs that had built dynamometer cars and acquired various designs, documents and code related to their efforts.
	 lan had built an Arduino based test rig and run up some of the code and had begun gaining familiarity with the code and identifying potential issues and bugs
	3. Mike had written up the functional spec and posted that and the meeting minutes on the web site
	 4. We assessed the donor coach which turned out to be in generally good condition. The coach will be used to host the dynamometer strain gauge coupling and the associated electronics and power supply. The coach will therefore require: a. External repaint and graphics TBC b. Integrated coupling unit that contains the strain gauge. Note that this supposes the strain gauge coupler goes after the loco driver and driving truck load in the train – need to find out what the norm is. c. Internal mountings for the power supply and electronics (weatherproof?) d. External display unit with a general purpose mounting on an adjacent truck e.g. in front of the driver?
Actions	 Ian Gurton to continue debugging the acquired software and complete the test rig. Mike Collins to build a coupling unit out of the fish scales provided by lar and test out at Puffing Park to establish the range and nature of the forces likely to be experienced.
Next Meeting	TBS