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“FMES Rugby Rally 2025”

This document was written by Peter Harrison and Paul Naylor, it was originally published by the FMES in the Autumn 2025 Newsletter

This year’s FMES rally was generously hosted by Rugby MES at their Rainsbrook Valley site on Saturday, 6 September 2025. The event brought together colleagues affiliated with the Federation of Model Engineering Societies for a memorable and enjoyable gathering. Members arrived from as far afield as the Isle of Wight, Brighouse, Halifax and Merthyr Tydfil. A truly national event for the Rugby Society.

The weather conditions proved highly favourable, contributing to the smooth execution of all scheduled activities throughout the day. A total of 94 model engineers participated in the rally, presenting an impressive array of models. These included twenty-three 3 ½” and 5” raised track locomotives—both steam and diesel—as well as seven 7 ¼” locomotives operating at ground level. The strong attendance and diversity of entries ensured that the event was both well-supported and dynamic. In addition, a number of tabletop entries and engineering exhibits were on display, including Tony Lee’s 3-inch Burrell Traction Engine, which made appearances throughout the extensive venue.



Ron Head, representing the City of Oxford club, presented his Adams 415 class Radial 4-4-2 locomotive in 5” gauge. The locomotive performed flawlessly and was subsequently recognised with the AALS award.

Of the three B1 steam locomotives running that day, ORXY is pictured being prepared by its owner, Stuart Ellis of Coventry.





The ground-level steaming bay was active with the preparation of 7 ¼" locomotives, characterized by distinctive sounds and aromas. A notable example, the Lynton and Barnstaple Baldwin model—ordinarily stationed at Cutteslow Park in Oxford—was presented at the rally by Simon Mulford, representing the City of Oxford Society.

Gordon Robertsy operated his 7 ¼" B type Darjeeling locomotive on the Rainsbrook Valley track, having travelled from Taunton to participate in the FMES rally. Attendees of the event had the opportunity to enjoy a ride behind this capable locomotive, as pictured here with Gordon at the controls.



The recipient of the FMES rally award was the meticulously crafted GWR Manor Class 7803 Barcote Manor, constructed by Roger James. The locomotive is pictured here being expertly operated by his grandson, Callum.

Locomotives were not limited to steam propulsion; Alan Stevens, a member of the Hayes and Harlington Club, operated his 5-inch gauge Class 55 Deltic locomotive, Alycidon, on the elevated track at Rainsbrook Valley.



The rally featured a well-prepared lunch organised by the ladies of the Rugby club, served in their newly completed clubhouse. The facility was specifically designed to support the club's activities during public running days. Lunch was enjoyed outdoors, while attendees observed an impressive array of locomotives operating on both the elevated and ground-level tracks.



Following lunch, numerous attendees participated in a tour of the mile-long ground track, which traverses the 7.5-acre site.

At the conclusion of the event, Bob Polley presented awards to the recipients from AALS and FMES. He also expressed his gratitude to Rugby MES for their hospitality and for ensuring all attendees felt welcome.

At the conclusion of the event, George Cannon, organiser of the Rugby MES event, formally expressed his gratitude to all rally participants for their attendance. He presented each attendee with a commemorative mug, marking the successful completion of another FMES rally.

Peter Harrison

AUSTRALIAN ASSOCIATION OF LIVE STEAMERS TROPHY 2025

The annual AALS trophy was held at the Rally as is usual, and there was an excellent array of locomotives to choose from, to give the judges a difficult decision, also as usual. The AALS competition has slightly restrictive rules that is mirrored in the sister competition run by the Australian Association of Live Steamers 'down under': it is for steam locomotives that are working models of prototypes that ran in the Commonwealth. If you own an engine that meets this condition, even if you are not the builder, then please consider coming to the rally and entering it, the rules and frequently asked questions can be found on the website (<https://fmes.org.uk/project/australian-association-of-live-steamers-trophy/>).

This year, the rally was held at the extensive raised and ground level tracks at Rugby SME and this gave all engines a chance to stretch their legs and show off their abilities.

It is not necessary to enter the competition as the judges will tour the locomotives and all will be considered for the competition if eligible. On this occasion, the decision came late as the eventual



winner steamed up quite late in the day and seeing an engine perform is an essential part of the competition! The judges (there is a triumvirate: a representative from FMES, one from the host club and the previous year's winner) had their usual difficult time and after discussion came to a unanimous decision.

The winner was Ron Head of the City of Oxford SME with his very nice 'Adams Radial Tank' in 5" gauge. Ron was very quick to point out that he was not the builder, however was persuaded to allow his loco to stand since firstly it is the loco that is judged, and secondly, the loco was very substantially rebuilt as Ron describes below.

“My 5” gauge model represents a 415 class engine as originally built, being basically to the design by Kelvin Moonie, and carries the Adams pea green livery with stovepipe chimney. It was acquired by me in 2017, basically in running order but in much need of attention. Over a period of two years, it was dismantled and re-built from the frames upwards, with re-painting as required. Many mechanical parts and fittings, and much pipework were replaced. One driving axle was found to be cracked longitudinally, and this had caused excessive wear to an axlebox, probably due to the crack acting as an oil scraper. All four driving axleboxes were bored out to a larger diameter, which necessitated new axles. All wheels were re-profiled and the driving wheels were keyed onto the new axles, while the incorrect balance weights were replaced by new ones. Much of the motion, including piston and valve rods, slide bars, eccentrics, crankpins, weighshaft and lifting links were re-made, and the rods were re-bushed.

Modifications were made to the regulator, axle pump, clacks and blowdown valve to improve their operation, and a new no. 4 injector was fitted. The water gauge bottom nut had an upward sleeve added to mask the lower end of the glass, due to the boiler bush being too low to ensure water coverage over the firebox crown. The lubricator was redesigned and re-built with a ratchet replacing the roller clutch, which had worn the drive shaft to the point where it no longer gripped. A problem with steam blowing back into the lubricator tank was cured by fitting check valves of an improved design. New soft-pop safety valves, spark arrestor, water valve, bypass valve, water strainers, stainless steel grate and ashpan, all to my own design were fitted. The springing was adjusted to place most of the weight on the driving wheels for adhesion, whilst keeping just enough weight on the bogie and trailing truck to prevent derailment. The smokebox door was re-profiled to the correct Adams profile and made an airtight fit.”

Ron also remodelled the valve gear using CAD with significant improvements to the running. Ron has volunteered to write this up as an article for publication, which we will be very pleased to make available in due course.

There is a fuller write up of the locomotive and Ron’s work in the AALS winners report, along with the same for previous winners, available on the website via the above link.



The 2025 FMES Autumn Rally Competition

This year, the rally was hosted by Rugby MES on the 6th September at their spacious facility near Rugby. It was held alongside the AALS competition, although this competition has less restrictive rules in that any 'type' of model engineering can enter as long as the hosts have the facilities to show the exhibits. In this case, whilst there was plenty of space, the majority of the models attending the rally were locomotives running on the extensive 7.25" gauge ground level track and the almost as long raised track for smaller gauges. Tony Lee, an FMES colleague and our newsletter editor brought his traction engine that was running almost all day around the grounds and very nice it is too, but, since Tony was a judge, he was not really in the running! Similarly, our Chairman Bob Polley brought his farm machinery models and these provided some diverse interest.

On this occasion though the judges decided that the prize should go to an excellent 5" gauge GWR 'Manor' class locomotive – 7803 'Barcote Manor' - built by Roger James, and driven by his son



Alan and grandson Callum (photo right). Roger has not painted this locomotive for reasons he explains below. This is a shame in some respects as it is not 'prototypical', however it also shows off the minute detail and construction methods used and is a great demonstration of the skills of a highly proficient model engineer.

Roger describes his locomotive and the project to build it as follows:

"The model, one of a pair, was started approximately 40 years ago and is now nearly finished. It was decided not to paint it as it allowed me to add more detail as I went along. Now the task of stripping ready for and actually painting it is just too daunting for me!





The loco frames were cut to Martin Evans design and later, where possible, works drawings provided the detail along with hundreds of photos of the prototype. Cookham Manor at Didcot provided the most authentic detail as it is still in the condition last used on British Railways.

The boiler was made with reference to Alec Farmers book, utilising a lap strip type joint on the taper barrel. A tapered fire box has also been made.



The tender is made to works drawings outline and incorporates a well tank, a twin cylinder hand pump is fitted that is equivalent to a single three-quarter inch diameter ram. For convenience it has been made modular and is easily removable.

Two scale injectors are fitted based on those provided years ago by the late Gordon Chiverton and have proved to be excellent in service. Displacement lubrication is used, via twin sight feeds, feeding through hollow stays in the boiler incorporating small chokes fitted into the superheater tubes in the smokebox.

I no longer drive any of my engines leaving this normally to my son Alan or my grandson Callum Rastall, he providing our family with a fifth generation of steam engineers.



The sister engine to 7803 is now being finished in the capable hands of Mr. Glyn Winsall whose father, Fred, gave me the inspiration to make a GWR Manor, after seeing his Hook Norton Manor so many years ago."

Roger was awarded the FMES Autumn Rally Competition Trophy and prize money by Bob Polley at the rally (with his son Alan, photo right).

We look forward to seeing more models of *any type* at future rallies to demonstrate that model engineering is a broad-based hobby, and to give these steam loco 'boys' a run for their money!

