



**BRANCH MEMBERS' VISIT
ROLLS ROYCE HERITAGE TRUST EXHIBITION DERBY
23rd April 2025**

Around 15 Branch Members attended this opportunity to visit this eclectic collection of some of the most notable artefacts and achievements of the illustrious Rolls- Royce aero engine company. The display is housed in the imposing Learning and Development Centre of the Aerospace Campus at the Derby works and matches the 'quality statement' expected of Rolls- Royce.

The knowledgeable and amiable volunteer guide for the visit, transported us through over 100 years of successful and notable aero engine development, This, commenced with the embryonic unexpected association of Charles Rolls and Henry Royce, both from separate ends of the social spectrum. Nevertheless, this brief partnership, Rolls being killed in flying accident at an air show at Bournemouth in 1910 formed a company that has endured.

From this history, we were introduced to the early piston powered aero engines in the form of the Eagle, Kestrel and the venerable Merlin, culminating in the mighty RR Griffon. The emphasis on appropriate fuels providing correct fuel burn and power and metallurgical advances, namely the use of aluminium to improve power to weight ratios being well explained.

Chronologically, the advent of the gas turbine brought RR to the development of the Power Jets Ltd (Frank Whittle) products. The challenges met in these early days, with the RR Welland and Nene and the extensive use of Monel metals to absorb the high temperatures in the process were explained and the visit continued viewing the early successful turboshaft engine the RR Dart and the more powerful, but less ubiquitous RR Tyne, Absorption of the Allison Engine company of the USA was described along with an earlier absorption of Bristol and Napier engine divisions, bringing technical expertise of a different value to the organisation.

Finally, we enjoyed the viewing of the single spool RR Avon and twin spool by-pass RR Conway and Spey turbo jets, culminating in the novel Pegasus (nee Bristol) and the mighty RB211 and Trent WXB. I noticed tucked away, the diminutive RR (Allison) 250 helicopter engine, some rocket motors and even the collaboration on business jet engines with BMW. Of course, few of us could not be impressed by the RR (Bristol) Olympus with engine intake control and re-heat, which powered Concorde.

This was not even a fraction of the engine archive that the RR Heritage Trust has overseen in recent years, but a small but notable collection of some of the more important aero engines of the last 100 years or more.

An excellent visit, scheduled to last 1 ½ hrs and easily ran to 2 hrs. Many of us attending, said we could have spent all afternoon in this absolute jewel of a collection.

*Steve Hogarth FRAeS
Branch Treasurer*