Rolls Royce Aero

By Chris Big

Today Rolls-Royce is the only UK aero engine manufacturer and the second largest in the World, sandwiched between the two major US companies; General Electric and Pratt & Witney. There was a time, however, when the UK had many companies building aircraft and their engines.

The lecturer, himself a recently retired Bristol-based aero engineer, started his talk to a large combined audience of the Cirencester Archaeological and Historical Society and the Cirencester Science and Technology Society with an outline of the history of Rolls Royce mainly from the perspective of its involvement at the Bristol based works.

From the beginning, when the engineer Royce met the wealthy car and early flying enthusiast Rolls, the well-illustrated talk showed the audience the evolution of British aeroplane engine design and production at the Bristol works. This began with the design and production of a growing range of piston-engined power units which were named after well-known birds such as the Hawk, the Falcon, the Eagle and the famous Merlin engine that powered Spitfires and Lancaster bombers. The earlier designs were usually air-cooled radial engines although subsequently the in-line water-cooled power units were aerodynamically more suited to the faster air speeds that were essential in World War Two.

The Bristol Aeroplane Company had an illustrious history of inventive aerospace developments that included planes such as the Bristol fighter in the Second World War and in the post-war years the huge, and unsuccessful, Bristol Brabazon. The more recent history of the British Aircraft Corporation, now rebranded as BAE systems, stretches back to 1910, through a complex history involving the absorption of famous names such as Hawker, Bristol Siddeley and Vickers-Amstrongs.

As the second half of the 20th century progressed the aero engine makers turned their attentions to jet propulsion and in the case of Rolls-Royce the naming of these expensive and complex units invoked famous mythological entities such as Pegasus, Olympus and Perseus and more recently that of British rivers with the Rolls Royce, Dart, Spey and Trent being examples.

The evening's superbly illustrated lecture demonstrated the huge contribution that Rolls Royce engineers have made to the global development of aero-engine design and development.