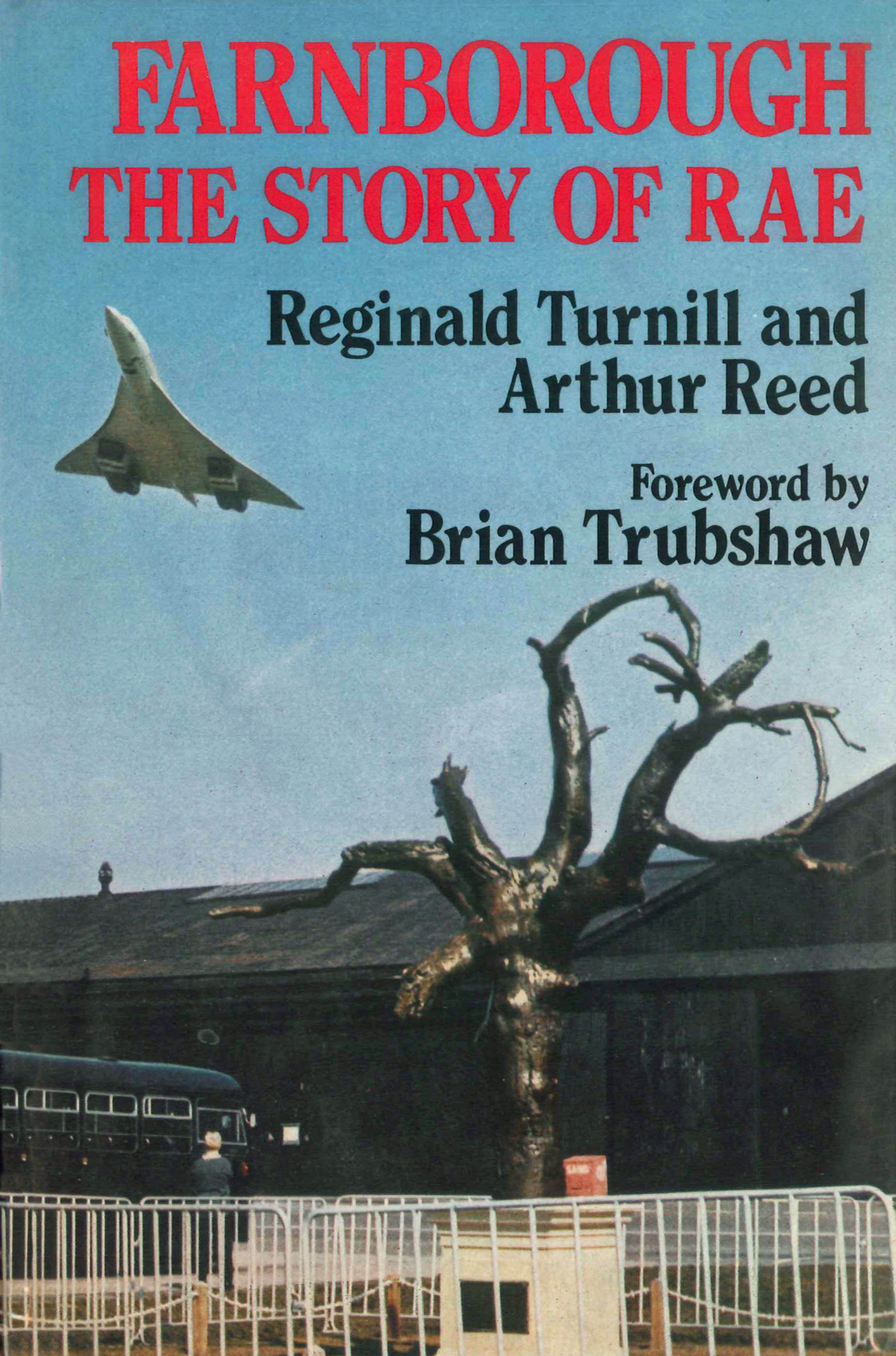
FARNBOROUGH
THE STORY OF RAE

Reginald Turnill and
Arthur Reed

Foreword by
Brian Trubshaw



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Foreword

By Brian Trubshaw,
Director Flight Test and Concorde,
British Aerospace

For me, the Royal Aircraft Establishment is the platform from which everything derives. Concorde, on which I have spent many years of my working life, was made possible by RAE's basic research.

My personal memories of Farnborough go back vividly to the immediate post-war years and what was then code-named 'Blue Danube'. That was in fact the A-Bomb, followed quite soon by the H-Bomb, and much work on both was done there. My job was to test-fly the bombs in the Vickers Valiant, the first of the V-bombers, which had been designed around the shape and very large size of Britain's first atom bomb. It was from Farnborough that I took off on one occasion after a dummy A-bomb had been loaded behind some large screens, so that not even RAE staff could see what was going on. But that particular test-drop off Orfordness on the East Coast was never completed, because the dummy A-bomb broke loose, and I was forced to drop it prematurely in the Thames Estuary and make an emergency landing with damaged bomb-bay doors at Manston. American servicemen there insisted that this unfamiliar but very advanced jet with a buckled bomb-bay ***must*** be a Boeing.

Over the years I have had a very broad exposure to RAE's research and development work, not only on civil and military projects but on the medical side as well. My friendship and respect for the flying doctors of the RAF Institute of Aviation Medicine, now an independent 'lodger' unit at Farnborough, has no bounds.

Test pilots like myself inevitably feel that there has been a thread of continuity flowing through aviation development from the pioneering days of Cody: like us, he had to do so much more than just fly the aeroplane. He represented the very complete example of what is known nowadays as the engineering test pilot. But our work on the civil side gets a good deal of public attention, while RAE's test pilots, often doing much more dangerous work on advanced projects, seldom get

mentioned. I hope this book will do something to correct the balance.

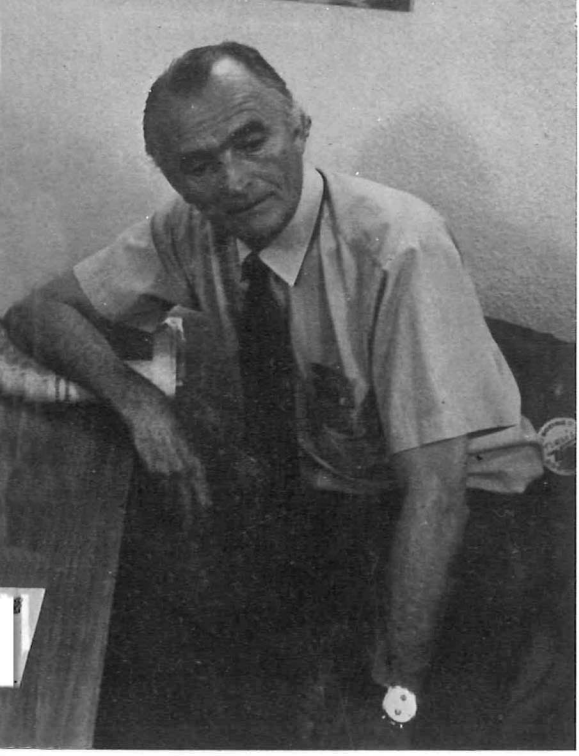
The Royal Aircraft Establishment, like research establishments throughout the world, gets criticized occasionally for being rather slow. But the pace there is inevitably different from that of a manufacturer with the job of getting a product on the market. Research is a vital element of progress, and my view is that it is best done in research establishments. Nowadays Farnborough is as busy as ever on military research, but there is a grave danger that Britain is not doing enough on the civil side. Despite the success of Concorde, we are now doing almost nothing in the advanced supersonic transport field, whereas the Americans have three supersonic transport research programmes. The day may come when we shall regret it.

So far as the authors of *Farnborough* are concerned, Concorde involved me in an unusual way in meeting the Press. I recognized in those meetings two complete professionals who knew what it was about and constantly got it right. I cannot think of two better people to write *The Story of RAE*.

Farnborough's Origins

This notice, unveiled by Marshal of the RAF Sir Dermot Boyle on 13th April 1972, to commemorate the 60th Anniversary of the formation of the Royal Flying Corps, hangs in the RAF Officers' Mess at Farnborough, on the spot from which Cody started the first official British powered flight on 16th October 1908:

> Farnborough can be fairly described as the birthplace of military aeronautics. A balloon factory of the Royal Engineers was transferred here from Aldershot in 1905, and when the Royal Flying Corps was established by Royal Warrant on 13th April 1912, it became the Royal Aircraft Factory.
>
> The HQ of the RFC was formed at Farnborough in 1912, together with Nos 1, 2 & 4 Squadrons, followed by Nos 5, 6 & 7 during the next two years. "*Per Ardua ad Astra*" was suggested as the RFC motto in 1912 by a Royal Engineer officer while at Farnborough, and was put forward for Royal Approval by Major F. H. Sykes, RFC Military Wing HQ Commander. Early in the war the main task of the RFC Wing at Farnborough was to form new squadrons. The Wing was commanded by Major Hugh Trenchard from August to November 1914.



Reginald Turnill *Photo: M. P. Hubrecht*

Arthur Reed *Photo: Peter Robinson*

Brian Trubshaw (*left*) and fellow test pilot John Cochrane *Photo: B.A.C.*