MEDALIST FOR 1971

For his personal devotion and many contributions to aircraft engineering and design and particularly for his outstanding leadership of the Bristol team in the development of the Anglo-French "Concorde" Supersonic Transport Aircraft.

SIR ARCHIBALD E. RUSSELL

There may be question marks about the Concorde's economic viability, but as a superb technological achievement, the world's first operational supersonic transport (SST) is a flying monument to man's ingenuity and determination.

And much of the credit must go to Sir Archibald "Doc" Russell, chief designer of Bristol Aircraft and head of the British team that helped bring a dream airplane into reality.

Russell, a stocky West Countryman with a reputation for speaking his mind in a strong rustic accent, served on the Supersonic Transport Aircraft Committee (STAC) that first tackled the double-headed problem: whether to build an SST and if so, how to build it. And when others wavered and vacillated, Russell sturdily insisted it could be done—and then showed them how.

He already had designed an experimental Mach 3 plane known as the T-188, built of stainless steel to resist the friction-spawned, metal-murdering heat of supersonic flight. From his T-188 experience, he knew the heat barrier was more crucial to supersonic flight than the sound barrier. But he also knew that to plunge into new, unproven fields of metallurgy would involve long delays and complexities that threatened the Concorde's competitive position.

It was Sir Archibald who convinced his British and French colleagues to stay within the state of the art, and it was Russell who created the SST's basic design out of a new aluminum alloy developed by Rolls-Royce. That decision, while it made the forthcoming SST a Mach 2 aircraft and a relatively small one, also speeded its development and brought supersonic travel to the world.

On one test flight, a Concorde actually took off for Paris from New York at the same time a 747 was leaving Paris. The SST landed in Paris, refueled, took off again and beat the 747 into New York by 11 minutes. But as important as speed has been the Concorde's value as an

airborne machine of truth—it has proved Doc Russell's courageous insistence that much of anti-SST propaganda was based on pure emotionalism and scientifically unfounded fears.

Russell became the joint chairman of the Concorde Executive Committee of Directors between 1965 and 1969. Russell was appointed Chairman, Filton Division of the British Aircraft Corporation (BAC) in 1968 and retired in 1969.

Russell won the Royal Aeronautical Society British Gold Medal in 1951, was made Commander, The Most Excellent Order of the British Empire in 1954, FRS in 1970 and Knighted in 1972. He died in Angorrack, Cornwall on May 29, 1995, one day short of his 91st birthday.