

REBIRTH OF THE WALLBRO MONOPLANE

Inspired by their father's first British homebuilt aircraft, which somersaulted on first flight and was tragically destroyed in a storm, a replica is born. *Adrian Bleese* talks to Ken Wallis

> LAST month, we commemorated the centenary of the first flight, in the summer of 1910, of the first British homebuilt aircraft, which had been constructed by brothers Horace and Percival Wallis at their home in Cambridgeshire.

This month, we look at how, in 1974, their sons Ken and Geoffrey conjured up a plan during a rather liquid lunch at The George in Dereham, near Ken's Norfolk home, that would bring back to life the achievements of their fathers.

Horace's son, Ken, is better known as Wing Commander KH Wallis – the designer, builder and pilot of numerous autogyros including 'Little Nellie' of James Bond fame. His cousin Geoffrey, a former member of the Parachute Regiment and private pilot, is Percy's son. Together, they somewhat rashly decided to build a replica of the original Wallbro monoplane.

There were, to their knowledge, no existing drawings or written details available and the aeroplane itself had been destroyed in a storm in 1910. The only clues they had

were some half-plate negatives taken by Horace, who had been a keen amateur photographer.

Ken knew his father's height and from that deduced not only all of the dimensions of the aircraft, but also that the airframe must have been made from 1in diameter steel tube. The steel for the original had been supplied by Accles & Pollock, who were delighted to be able to supply the tube for the replica. When they enquired as to the gauge required, Ken answered, "Let's keep it light and have it in 20 gauge."



The fuselage was completed by 1976 and the spacing in the frames meant there was little space for a modern aero-engine. Unfortunately, a V4 JAP engine (as fitted to the original) was no longer an available option, so it was decided to employ a de-rated McCulloch target-drone engine producing around 60hp, as used in Little Nellie and several other of Ken's autogyros.

It was at around this time that the fame of Little Nellie led to a very fortuitous meeting. Ken received a telephone call from a lady named Rosemary, who turned out to be his cousin, the daughter of his Uncle Garnet, his father's youngest brother. She had seen a piece in her local newspaper about Ken's display with Little Nellie at the Royal Devon Show the previous weekend and asked if they could meet. Ken was only too pleased to meet this long-lost relation, but even more so when she presented him with a poster detailing the original public display of the Wallbro monoplane. She also had some aero-engine manuals that had been owned by her father, an engineer in the Royal Flying Corps during World War One.

A short while later, Ken was leafing through

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one of these manuals when a newspaper cutting from the Cambridge Daily News fell out. It detailed all of the dimensions of the aeroplane – including the use of 20 gauge steel. Ken was obviously pleased to have his 'intelligent guess' confirmed.

Construction continued as planned, with the cousins' enthusiasm now bolstered by the chance discovery that showed that their plans were even closer to the original than they might have hoped.

In some of the original photographs, there appeared to be two control wheels, one either side of the cockpit. However, fortunately, others showed the Wallbro with a single control wheel mounted on top of a pitch lever, just as in a modern aeroplane. The cousins decided to go with the now more conventional layout and they completed the replica Wallbro monoplane by the summer of 1978.

So, on the morning of 11 August that year,

Ken started carrying out the first taxi tests on G-BFIP at RAF Swanton Morley in Norfolk. On the second run he remembers, "I eased forward slightly on the control wheel, the tail came off the ground and she took to the air. I did, however, have an advantage over my father in that I knew how to fly before I got airborne in the Wallbro for the first time."

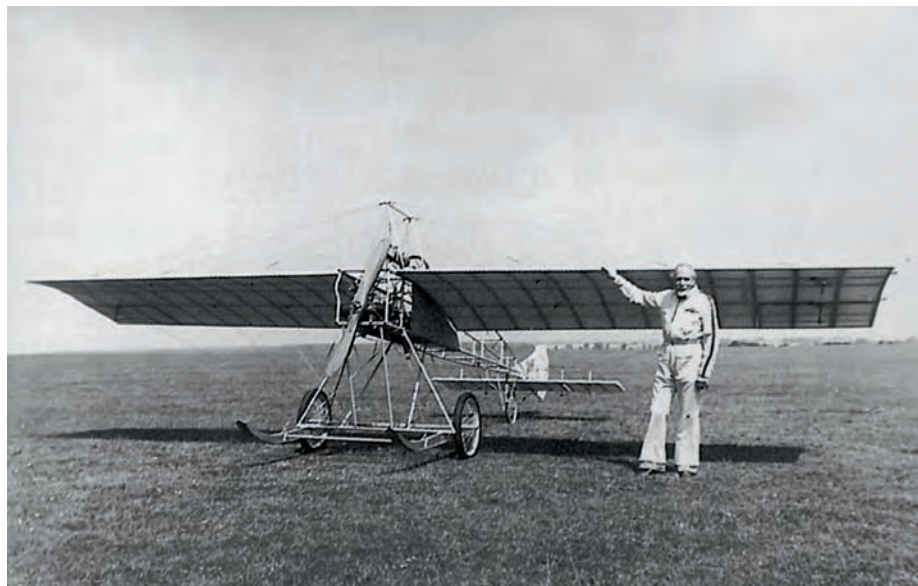
A number of flights followed and Ken proved that the Wallbro monoplane was, as the Cambridge Daily News had said 68 years previously, "A fine piece of work [incorporating] a number of novel ideas."

The aeroplane is now housed at the Norfolk and Suffolk Aviation museum at Flixton near Bungay in Suffolk, where Wing Commander Wallis celebrated the centenary by opening the Wallis Hangar, which will eventually house his entire collection.

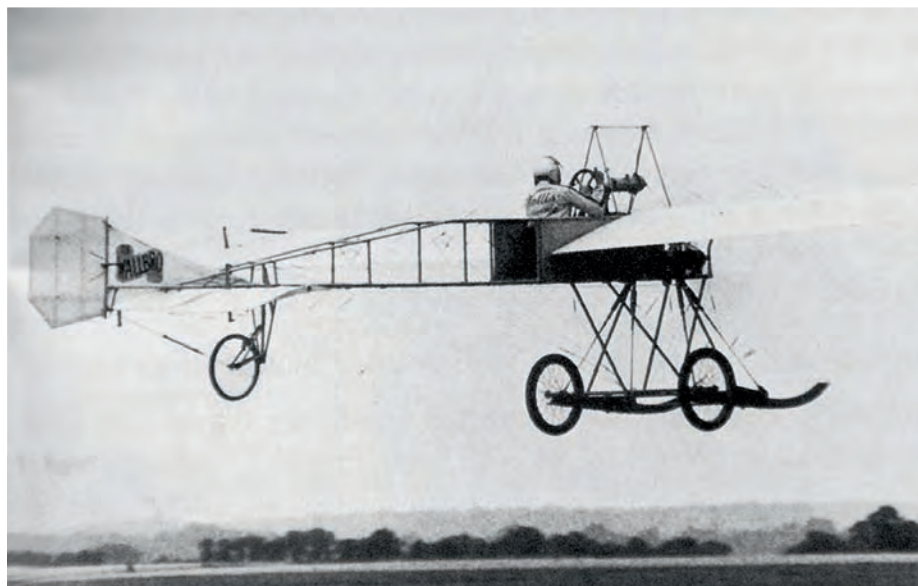
www.aviationmuseum.net



Ken in typical pose, at home in an autogyro.



1978: Ken Wallis and the replica Wallbro monoplane that he co-built with cousin Geoffrey.



The replica Wallbro monoplane flying in 1978; its pilot had the advantage of knowing how to fly.

PHOTOS: Ken Wallis