

## Tom Kerr 1924-2004 Local boy who reached for the skies

Tom Kerr went to Claypole School in 1929 and then the Magnus Grammar School in Newark. He didn't want to take up farming on his father's farm in Westborough but instead went on to have an impressive career in aeronautics, the science of all technologies relating to flight.



Tom's father Albert, born in 1900, was an apprentice at the Nottingham Corporation farm - used for absorbing the City sewage. The stories of a WW1 fighter ace Albert Ball who used to regularly visit the farm inspired Tom's father to join the Royal Flying Corps when he was old enough. However, Albert could not be a pilot as he was physically too big a man and it was considered he would be an easy target for the enemy. He joined the Royal Observer corp instead and on missions flew without a parachute and used two pigeons for communication! In 1919 Albert took up farming at Hougham. Tom's mother Frances was born at Claypole, the first of seven children, and went to school in Marston - walking there every day. During WW1 Frances and her siblings watched Zeppelin airships trying to bomb the railway line that passed near their home. Albert and Frances married and the family moved to Hill Farm, Westborough.

Tom and his brother Vic were born there and as they grew up had to help with the many chores of running a busy farm. When Tom was 11 he persuaded his father to buy him an old BSA motorbike which he rode around the fields with brother Vic on the back. He taught Vic, aged 8, to ride another acquired Douglas motorbike and they had motorbike races going around a circuit in the paddock.

Tom did not pass his 11+ exam to get into the Magnus Grammar School in Newark, but his father paid for him to go instead. This cost £4.10s per term. Tom's father took him to see air displays at RAF Cranwell which started his interest in aircraft. In 1941 when the Magnus Air Training Corp - today's equivalent is the Air Cadets - was formed Tom was one of the first to join.



Members of the Magnus ATC 1941 and 50 years later...

In the Second World War Tom joined the RAF Voluntary Reserve and trained as a pilot and subsequently as a flying instructor. After demob he went to Durham University to study for a degree in Physics (getting a 1st) and joined the Royal Aircraft Establishment at Farnborough. The RAE was the world class organisation based in the UK that undertook research and development of aircraft. It was home to the UK Test Pilots School, the Air Investigation Branch and others. Now known as DSTL and Qinetiq.

There were many varied research topics that Tom was involved with - all of them highly significant in developing the use of aircraft and missiles. Much was needed to be understood about the dynamics of early jet flight and Tom worked on aspects of flight for Meteor bombers and the later V bombers that carried the UK Nuclear Deterrents. He became a scientific advisor to Bomber Command and was involved in the responses to the Cuban Missile crisis that came very close to causing a global nuclear war in 1962.

In the 1950's the De Havilland Comet was the first commercial jet airliner and tragically three came apart in flight in under a year. Over 400 people lost their lives. One flight was lost over the Mediterranean and Tom was able to calculate where the aircraft debris was likely to be found. The debris was located where Tom

had calculated within two days. He played a key part in understanding why this was happening and more importantly how it could be prevented. This required an urgent answer and the subsequent investigation led to a significant redesign of the fuselage by thickening the aircraft skin and changing the shape of the windows to near circular to avoid stress concentrations.



He was involved in the Fairey Delta 2 aircraft obtaining the world air speed record and also setting up the longevity testing of Concorde. The Concorde structural test facility was set up to simulate the stresses placed on the aircraft in flight. Ultimately it cleared the aircraft to fly until 2012, but of course it was taken out of service long before that. Tom was part of the team investigating the 'G Forces' that occur at high speed/altitude and at one time experienced the effect for himself in a flight. A very exhausting

and unpleasant experience apparently - but no doubt very informative .

When aircraft noise became a problem with Concorde and other aircraft Tom Kerr played a major role in determining the regulations that came into force.



He was appointed Director of the RAE - the most senior position - in 1980. His direct involvement and expertise significantly helped the defence forces at the time of the Falklands conflict in 1982 by providing pilots with experimental night vision equipment and other help.

As Director, Tom was invited to give presentations of his research in the USA, China, Australia and elsewhere to government bodies, universities and to the aerospace industry and he was often accompanied by his wife Evelyn. He also had to organise regular visits to RAE for members of the Royal family, International dignitaries and many senior service and political figures.

He represented the Royal AeroNautical Society on the Parliamentary Scientific committee for five years looking at Public Health, Global Warming and the British Antarctic Survey Laboratories.



After retirement he became a Director of Royal Ordnance and of Hunting Engineering - a major Defence Contractor - from 1986-1994. Hunting were involved in the design and manufacture of armoured vehicles and missiles and Tom helped Hunting to secure long running contracts to manage the UK Atomic Weapons Establishment.

Having been a lifelong member of the Royal Aeronautical Society, in 1985 he became the President. He had the honour and privilege of meeting with and giving presentations to many of it's groups around the world and meeting with the first UK astronaut Helen Sharman. He was also awarded a CB by the Queen and made a Freeman of the City of London.

He returned to the Magnus in 2003 to give a presentation about his career to help inspire the 6th form students to follow a career in technology.

Tom's brother - Vic Kerr of Westborough, his wife Betty and their children are well known and loved local people. Vic has served on the parish council in Westborough since 1956 and was our District Councillor at SKDC for 23 years.

These two brothers have given much of their life to serving the public good and we should be both grateful and proud of their efforts on our behalf.



When Karen and I rented a villa in a remote part of Mallorca several years ago we were amazed to find a signed copy of a self published autobiography of Tom Kerr on the bookshelf. We have never been able to find out how it came to be there.



Many thanks to Vic and family for access to the family records.

The next topic will be based on the articles written by Kathy Cragg describing her first 30 years of living in Claypole for the June and July 1993 issues of the Parish Magazine - 25 years ago.