

Excerpts from Test Flying in Lancashire from Samlesbury and Warton Aerodromes *Military Aviation at the Leading Edge*

Volume 1: WW1 to the 1960s

'As work on the A1 [Canberra] proceeded apace, interspersed with his routine production test flying of Vampires, from August 1947 Beamont [Wing Commander Roland Prosper Beamont, English Electric Chief Experimental Test Pilot] commenced preliminary investigations on the Petter-inspired [W.E.W.Petter – designer of the English Electric A1 Canberra], by then Government-sponsored, research contract into compressibility and manoeuvrability at altitudes in excess of 40,000ft. For this he used Meteor F.4 *EE545*, allocated to English Electric for the duration of the trials, an aircraft which as well as its usefully high subsonic speed and high altitude capability, had the added handling advantage of similarity of configuration to the forthcoming bomber. By this time, English Electric had acquired an additional airfield at Warton, to the west of Preston, and it was there that the trials took place.'

'On Thursday 28 August [1947] Beamont took the aircraft up from Warton on the first of a series of 44 experimental test flights which he made from the Lancashire airfield up to July 1948. The flight, of 35 minutes' duration, was the very first experimental test flight from Warton, so 28 August 2012 marks the 65th Anniversary of a most significant event in company and British aviation history. The programme that followed involved a series of test flights ranging from brief 15 or 20-minute air tests to sorties of up to 55 minutes during which Beamont attained, for those days, some impressive altitudes of up to 47,200ft.'

'On his 21st flight, one of 30 minutes' duration on 26 November 1947, at 35,000ft he experienced a starboard engine flame-out that proved impossible to relight. In an outcome that tested his already legendary airmanship to the utmost he not only proved his mastery of the single-engined asymmetric handling of a twin-jet under such conditions, an experience that would later be of value to him with the Canberra, but was also able to land the aircraft safely back at Warton in a Fylde Coast winter gale-force crosswind. The event portended the levels of skill Beamont would repeatedly bring to bear during his flight test career at Warton over the next two decades.'

'The trials were carried out at what were then the frontiers of flight, beyond conventional limits of safety, in conditions of extreme cold soak with consequent misting, even icing-up inside the canopy during the descent, all the time requiring continuous attention to dead-reckoning navigation in the certain knowledge of there being a total lack of navigational aids back at Warton. The pilot, battling with a primitive demisting system, then had to hope that he had enough fuel left for a high speed run at relatively low level to generate sufficient 'ram' air temperature in the airframe to disperse condensation to enable him to find the runway. Such was the nature of test flying early jets in the late 1940s.'

'In another experimental test flight [this time in Vampire FB.5 *VV453* on 30 July 1948] a crack in the *Perspex* resulted in the cockpit canopy bursting with explosive decompression at 43,000ft, the aircraft entering a steep dive, causing Beamont to briefly lose consciousness. Coming to, he was able to level out at 33,000ft above a continuous cloud sheet. But he was by no means out of danger. Not knowing his precise whereabouts, he had to descend very cautiously through 4,000ft of cloud, for safety steering west towards the sea, rather than east toward high ground. Breaking cloud at 2,000ft over the Wyre estuary, he made a welcome but thoroughly unpleasant, cold and draughty low-level return to Samlesbury. Amazingly, his eardrums remained intact, though he suffered severe headaches for days afterwards.'

The above excerpts are taken from the first of a series of three books on *Test Flying in Lancashire*, by local writer James H. Longworth, the first volume of which is to be published by the BAE Systems Heritage Department at Warton in September 2012.

Jim Longworth is also the author of the well-known book *Triplane to Typhoon*, detailing all the aircraft made in Lancashire during the last century, which was published in 2005 by Lancashire County Council with the support of BAE Systems.