

### **A man-made mosquito**

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The name 'mosquito' was used for a British-built De Havilland military aircraft that made its maiden flight over sixty years ago, on November 25 1940. Here is a very brief account of the aircraft that bore the name of the insect that we all study and know so well. It was successful for a short time only, unlike the true mosquito that seems to go from success to success.

The de Havilland Aircraft Company was noted for its light aircraft, such as the famous Tiger Moth. In 1936 they had built the DH91 Albatross airliner and mail plane entirely in wood. With great foresight they proposed to build the Mosquito aircraft predominately of wood. De Havilland had surmised that aluminium for aircraft would be a very scarce commodity and so would those metal workers who were skilled in the construction of aircraft. There would be, on the other hand, many experienced carpenters, furniture makers and other woodworkers available whose skills could be used.

The fuselage was made with a sandwich of balsa wood between two ply skins built on spruce stringers. The wings had two spars with double plywood skins on the top and single underneath. It was made in two sections split down the length. After all internal fuselage wiring and controls had been installed the two halves were then glued together. The flying control surfaces were of light alloy with a metal skin on the ailerons and fabric on the tail. The landing gear was simple twin shock struts filled with rubber blocks.

The first Mosquito sortie was made on September 20, 1941, when a single aircraft made a reconnaissance flight over France. By late 1942 the Mosquito was becoming operational in ever increasing numbers, and its unique qualities of very high speed and long range clearly made it an ideal aircraft. This was an early, possibly the first, industrial employment of the laminated wood which later went into the construction of high performance sailing and motor craft. Two Rolls-Royce Merlin engines provided power for the aircraft and were extremely efficient. They give the Mosquito a maximum speed of over 600 km/hour and a range of over 3000 km.

The Mosquito aircraft carried phenomenal loads over extremely long distances, performing feats out of all proportion to the specification originally envisaged by its designers. In short, the Mosquito was an outstanding aircraft in every respect.

A Mosquito, PF604, was used as the launch and recording platform for the Vickers-built rocket powered Miles M52. This was a pilotless supersonic scale model aircraft that eventually achieved Mach 1.38 on 9 October 1948 and became the first British aircraft to exceed the speed of sound in level flight.

In all nearly eight thousand Mosquito aircraft were built in forty-three variants. They were produced in the United Kingdom, Australia and Canada. The last Mosquito that was built, a NF 38 (VX916), rolled off the production line at Chester, England on 28th November 1950 but many remained in service around the world well into the late nineteen sixties.

Like the true mosquito, the aircraft was rapid in flight, extremely adaptable and both a daytime and night-time flyer. Nonetheless, after a few years it became obsolete and was replaced by others. The insect of the same name has also changed over time, though in this case over millions of years, continuously adjusting to changing conditions, and is an almost perfectly adapted insect. It has evolved a large number of versions, over a hundred times more than the aircraft that bore its name and, despite intense anti-mosquito operations, shows no signs of following its man-made namesake into obsolescence.