

Case Study 07: Hydraulic and breathing air services in the Wellington Bomber

Tungum Alloy's first major application was in tube form for the various hydraulic and breathing air services in the Wellington Bomber.

The Tungum Solution



One of the early Tungum Alloy applications was in tube form for use on the various hydraulic and breathing air services for the Wellington Bomber.

The reason for using Tungum was because of its extremely good resistance to fatigue and its high strength to weight ratio.

Thereafter, it was extensively used throughout the R.A.F.'s "fleet" until the jet aircraft "TSR2" was abandoned in 1965. By then the Army and Navy had adopted Tungum tubing as being the material of choice for these types of arduous applications.

Ditching in Loch Ness

On New Year's Eve in 1940 a training flight went horribly wrong when a Wellington N2980 Bomber suffered engine failure. Most of the crew were ordered to bail out, leaving the Captain and a second pilot to deal with the failing aircraft. Luckily, the pilots spotted a nearby body of water and managed to make a perfect landing on Loch Ness - bailing from the bomber before it vanished beneath the water. Aside from one fatality, when a parachute failed to open, the crew survived the ordeal.

The plane, unfortunately, was lost beneath the waters of the Loch. The wreck had lain beneath the water for almost 45 years before divers stumbled across the wreckage in almost perfect condition. It was finally recovered from its watery bed in September 1985. The aircraft is now in Brooklands Museum, Weybridge and is one of two Wellington Bombers still intact.



Thank you to Brooklands Museum photo archive for the use of the two photographs.



Tungum vs. Stainless Steel

Tungum tube (right) recovered from the Wellington.

Tungum remains unscathed despite submerged for 45 years in Loch Ness, the sample stainless steel section shows both crevice corrosion and pitting