

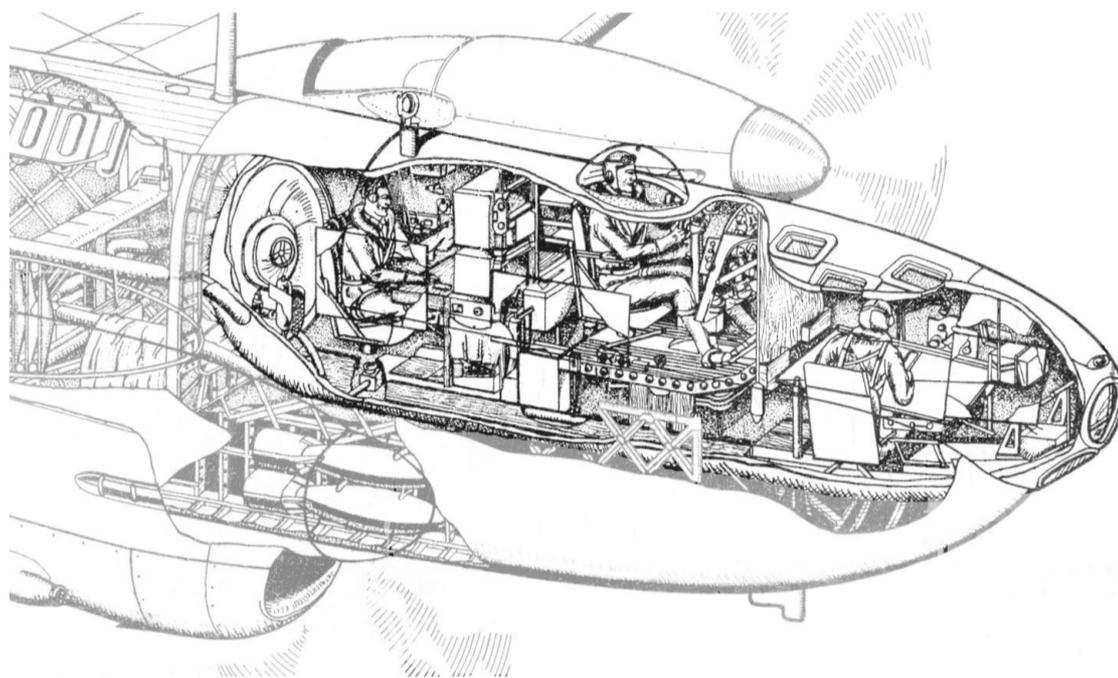
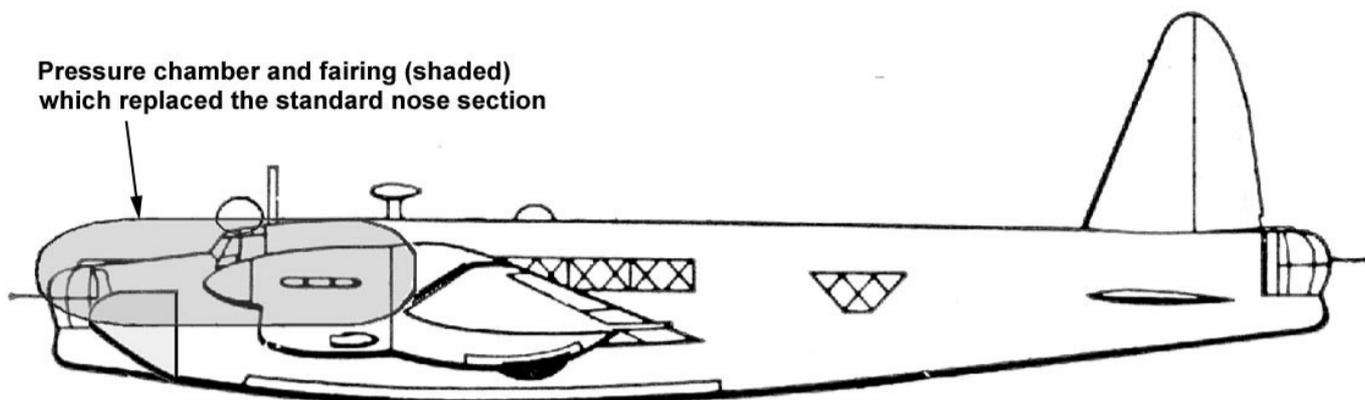
## For the technically minded

### Aircraft data

#### Vickers Armstrong Wellington Mk VI (Type 431)

A total of almost 11,500 Wellingtons of various marks were produced, mainly for use in the RAF's medium bomber role in which they carried a bomb load of about 4500lb. The Wellington first flew in June 1936 and the type entered squadron service in 1938, finally being retired in 1953. The various marks were powered by a range of engines including Bristol Pegasus and Hercules, Rolls-Royce Merlin and Pratt & Whitney Twin Wasp.

The Mks V & VI were intended for a high-altitude bomber force. The design of these aircraft replaced the standard forward fuselage structure with a bullet-shaped cabin 18ft 3in long and 5ft 5in diameter, entered by a 3ft 2in circular hatch at the rear, and pressurised to 7.5lb/sq.in by blowers fitted to the engines. The standard, unpressurised, rear four-gun turret was retained for defence. With problems outweighing advantages by the time it was ready for service, only 67 were produced, and the few Hercules-powered aircraft were converted to Merlin power.



The Mk.V was fitted with Hercules VIII engines, and the Mk.VI, of which W5795 was the prototype, utilised the Merlin 60, with the Merlin 62 being use on later aircraft.

### Basic data

Wing span	86ft 2in
Length	64ft 7in
Height	17ft 5in
Weight (loaded)	30,450lb
Bomb load	4500lb
Range (max.)	2180 miles
Ceiling	38,500ft
Speed	300mph
Crew	Pilot, navigator/bomb aimer, wireless operator, rear gunner

### Engine data

#### Rolls-Royce Merlin Mk.60

Almost 170,000 Merlins were produced between 1935 and 1951 and served in a wide variety of military and civil aircraft types, notably Spitfire, Hurricane, Mustang, Lancaster and York. The Mk.60 featured a two-speed, two-stage supercharger. It was intended to power the Vickers Armstrong Wellington Mk.VI pressurised bomber and to this end was fitted with a cabin blower to provide the pressurisation. A total of 75 were built at Derby between June 1941 and March 1942. The Mk.62 used in the later aircraft was similar but had separate cylinder blocks and heads in place of the earlier one-piece blocks.

Engines 68231/A2546047 and 68505/A278450 were installed in Wellington VI W5795 that crashed at Stanley.

### Basic data

<b>Type</b>	<b>12-cylinder, liquid-cooled, 60° V, geared, supercharged</b>
Take-off power	1390 bhp at 3000rpm and 12lb boost
Bore & stroke:	5.4 x 6.0in. (137.2 x 152.4mm)
Swept volume:	1648cu.in. (27 litres)
Compression ratio:	6.0:1

### Supercharger

**Two-speed, two-stage, intercooled**

Gear ratios: 5.52/8.41

### Propeller reduction gear 0.42

Fuel consumption	about 45 gallons per hour
Length	87in. (2210mm)
Weight	1650lb (748kg)

Peter Kirk

