

## **The B-47 *Stratojet* Association**

**XB-47D**



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During the late 1940s and early 1950s, the USAF was interested in determining the feasibility of producing a high speed, long-range turboprop-powered bomber. In support of this goal, the Air Force requested that a pair of B-47Bs be converted as flying testbeds to test a jetengine-propeller combination and to provide data on the installation of turboprops in swept-wing aircraft.

In April of 1951, Boeing received a contract for the modification of two B-47Bs as flying turboprop testbeds under the designation XB-47D. The two B-47Bs selected for the conversion were serial numbers 51-2103 and 51-2046. They retained the outboard J47-GE-23 jet engines of the B-47B, but a single Curtiss-Wright YT49-W-1 turboprop of 9710 equivalent shaft horsepower occupied each of the inboard underwing nacelles in place of the paired J47s.

The T49 was a turboprop version of the Wright J65, which was an American version of the British-designed Armstrong Siddeley Sapphire turbojet. The turboprops drove four-bladed propellers 15 feet in diameter having paddle type blades each 24 inches wide. The wing flaps had to be modified to accommodate the T49s, and changes had to be made in instrumentation and controls for four engines rather than the usual six.

The program was delayed by problems with the T49 engine, which failed to pass its 50 hour qualification run. Additional problems with the engine-propeller combination and shortages of government furnished equipment delayed progress still further. It was not until late 1955 that the aircraft were ready for their first flights.

XB-47D 51-2103 flew for the first time on August 26, 1955, with 51-2046 following on February 15, 1956. Although numerous test flights were made without mishap, no further conversions were ordered and the Air Force never pursued its idea of a turboprop-powered bomber any further. The maximum speed achieved by the XB-47D during these tests was 597 mph (519 knots) at 13,500 feet, the fastest achieved in level flight by a propeller-driven aircraft.

## **Specifications of the Boeing XB-47D Stratojet:**

### **Powerplant:**

**Two Wright YT49-W-1 turboprops, 9710 shaft hp each.**

**Two General Electric J47-GE-23 turbojets, 5800 lbs. static thrust each.**

### **Performance:**

**Maximum speed: 597 mph (519 knots) at 13,500 feet.**

**Service ceiling: 33,750 feet.**

**Initial climb rate: 2910 feet per minute.**

### **Dimensions:**

**Wingspan: 116 feet 0 inches.**

**Length: 108 feet 0 inches.**

**Height: 28 feet 0 inches.**

**Wing area: 1428 square feet.**

### **Weights:**

**Empty: 79,800 pounds.**

**Gross Takeoff: 184,428 pounds.**

**Armament: The XB-47D was not fitted with any armament.**

