



SCALE 1/72

Американський експериментальний бомбардувальник

Martin XB-51

American trijet ground-attack aircraft

Martin XB-51 — американський тримоторний штурмовик. Він був розроблений у 1945 році та здійснив свій перший політ у 1949 році. Спочатку він був розроблений як бомбардувальник для ВПС США за специфікацією V-8237-1 і отримав позначення XA-45. Наступного року класифікація «А» була скасована, а замість неї було присвоєно позначення XB-51. Літак розроблявся як низько висотний бомбардувальник підтримки, який мав замінити Douglas A-26 Invader.

ХВ-51 програв в конкурсі англійській Electric Canberra. Хоча ХВ-51 не було обрано для закупівлі, було вирішено, що Martin побудує 250 Canberra за ліцензією під позначенням В-57. Крім того, обертовий бомбовий відсік Мартіна буде включений у серійні варіанти В-57. Було також запропоновано «Супер Канберра», що включає інші особливості ХВ-51, такі як стрілоподібні крила та оперення. Цей літак – хоча він обіцяв набагато кращі швидкість і характеристики, ніж В-57 – не був прийнят на озброєння, головним чином через те, що інноваційні технічні рішення зайняли б надто багато часу для впровадження та випробувань, перш ніж його можна було б запустити у виробництво.

The Martin XB-51 was an American trijet ground-attack aircraft. 0

This unorthodox design, first flying on 28 October 1949, was fitted with three General Electric J47 engines - an unusual number for a combat aircraft - two underneath the forward fuselage in pods, and one at the extreme tail with the intake at the base of the tailfin. The innovative, variable incidence wings, swept at 35° and with 6° anhedral, were equipped with leading edge slats and full-width flaps. Spoilers gave most of the roll control and undersized ailerons provided feel for the pilot. The combination of variable incidence and slotted flaps gave a shorter takeoff run.[3] Four 954 lb (4.24 kN) thrust Rocket-Assisted Take Off (RATO) bottles with a 14-second burn duration could be fitted to the rear fuselage to improve takeoff performance. Spectacular launches were a feature of later test flights.

The main landing gear consisted of dual wheel sets in tandem in the fuselage, similar to the Boeing B-47 Stratojet, with outrigger wheels at the wingtips (originally proved on a modified Martin B-26 Marauder named "Middle River Stump Jumper"). The XB-51 was a large but aerodynamically "clean" design which incorporated nearly all major systems internally. The aircraft was fitted with a rotating bomb bay, a Martin trademark; bombs could also be carried externally up to a maximum load of 10,400 lb (4,700 kg), although the specified basic mission required only a 4,000 lb (1,814 kg) bombload. Eight 20 mm cannon mounted in the nose would have been installed in production aircraft.

Crew was a pilot under a "fighter"-type bubble canopy and a Short-range navigation and bombing system (SHORAN) operator/navigator in a compartment located lower than and to the rear of the cockpit (only a small observation window was provided). Both crew members were provided with a pressurized, air conditioned environment, equipped with upward-firing ejection seats.

In 1950, the United States Air Force issued a new requirement based on early Korean war experience for a night intruder/bomber to replace the Douglas A-26 Invader. The XB-51 was entered, as well as the Avro Canada CF-100 and English Electric Canberra; the XB-51 and Canberra emerged from these as the favorites.

Test flights showed the XB-51 to be highly maneuverable at low altitudes and substantially faster than the Canberra and faster than most fighter aircraft of the era.[3] However, the XB-51's endurance was significantly lower than that of the Canberra and this factor was decisive in its cancellation. In addition, a load limiting factor of only 3.67 g (36 m/s2) meant that the general strength of the airframe was relatively low and would prevent tight turns while fully loaded. Additionally, the tandem main gear plus outriggers of the XB-51 were thought unsuitable for the requirement to fly from emergency forward airfields. While the XB-51 was not selected for procurement, it was decided that Martin would build 250 Canberras under license, under the designation B-57. Furthermore, Martin's rotating bomb bay would be incorporated into production variants of the B-57. A "Super Canberra", incorporating other XB-51 features, such as swept wings and tail-planes, was also proposed. This aircraft – although it promised much better speed and performance than the B-57 – never reached the prototype stage, mainly because the many changes would have taken too long to implement and test, before it could be put into production.





















