





## IJA Type 99 army assault plane **Ki-51** ((**Sonia**))

The IJA Type 99 Ki-51 «Sonia» was a very successful Japanese ground attack aircraft that remained in service throughout the Second World War. It was developed from the IJA Type 97 Ki-30, a light bomber that made its maiden flight in February 1937 and entered service in 1938. Work on the Ki-51 began in December 1937 at the suggestion of Captain Yuzo Fujita. The new aircraft had to be manoeuvrable, and because it was expected to operate at low levels, to be unusually heavily armoured for a Japanese aircraft of this period. The Ki-51 resembled a smaller version of the Ki-30. It used a similar fuselage and the same wing form, although the wings were mobbed from their mid-position on the Ki-30 to the base of the fuselage to reduce the length of the fixed undercarriage. The cockpit was shortened, bringing the two crew members closer together. The bombs were carried externally.

The first two prototypes were completed in June and August 1939. Eleven service test aircraft followed by the end of the year - at this stage 6mm steel armour was added under the engine and cockpit. It had originally been planned to produce two versions of the Ki-51 - the Army Type 99 Assault Plane and the Ki-51a Army Type 99 Tactical Reconnaissance Plane, carrying cameras in the rear cockpit. Instead of this the Army decided to give every Ki-51 the ability to carry cameras, and the aircraft could easily be swapped between roles in the field. A total of 1,459 production aircraft were built by Mitsubishi and 913 by the Tachikawa Dai-Ichi Rikugen Kokusho (the Army's own arsenal). During the production run the 7.7mm wing guns were replaced by two 12.7mm machine guns, but otherwise the design remained unchanged. Production ended in July 1945. The Ki-51 was used in a close support role in China and in every theatre where the Japanese Army fought during the Second World War. Although the Ki-51 lacked speed it was manoeuvrable, and unusually for a Japanese aircraft of the Second War, well protected. It was also easy to maintain and could operate from small airfields close to the front line. As a result it remained in use until the end of the war, and in production until July 1945.

Specifications IJA Type 99 Ki-51 - Crew: 2; Lenght: 30'2" (9.21m); Wingspan: 39'8" (12.1m); Weight: 4129-6426 lbs (1873-2798 kg); Wing area: 259 sq. feet (24 sq. m); Max speed: 263 mph (424 km/h) at 9840 feet (3000 m); Climb rate: 27.6 feet per second (8.4 m/s); Ceiling: 27130 feet (8270 m); Range: 660 miles (1060 km); Engine: 1 x 709 kW (950 hp) «Mitsubishi Ha.26-II» (14-cylinder air-cooled radial engine); Armament: 2 x 7.7 mm Type 89 machine guns (replaced with 12.7 mm Ho-103 in later models); 1× 7.7 mm Te-4 machine gun; Bombs: 441 lbs (200 kg) normal loads or 551 lbs (250 kg) for suicide operations.

## **⚠** CAUTION

- ★ Read carefully and fully understand the instructions before commencing assembly.
- ★ Adult supervisor should also read instructions when assembled by children aged 12 or younger.
- ★ Tear up and throw away the plastic bags containing kit parts as children may suffocate by swallowing or wearing over head. ★ Cut the parts off properly and throw the waste parts into dustbox at once.
- ★ Do not play with the parts for any other purpose as some parts may be too sharp. More caution and care needed for families with
- ★ Do not swallow any parts and cut-off chips. Keep away from reach of children.
- ★ Wrong or careless usage of nipper, cutter, file etc. may hurt the assembler.
- ★ Be cautions as follows when using adhesives and / or paints:
- Do not use in closed room to avoid poisoning / toxic.
- Do not use near fire to avoid flammability.
- Do not put any adhesives and / or paints into mouth and eye. If mistakenly put into, wash out promtply with full water and cosult
- ★ Use toolings, adhesives, paints, batteries etc. properly after careful reading of instructions given in each handling manual.









