

Tipsy Nipper

Belgium may not be very famous for aircraft construction, but some designs have been extremely successful. Remember the SV-4 training biplane? The majority may have been built in France but it was a true Belgian design. You know the Tipsy Nipper? Not British, but definitely Belgian, although the primary source for plans or spare parts is the UK.

The Nipper was the brainchild of Ernest Oscar Tips, who worked for the British/Belgian Avions Fairey company. His idea was to make a sturdy, affordable and easy-to-fly single seater. Performance was only a second consideration, but simplicity was of high importance to the designer who envisaged both factory and amateur construction for the tiny aircraft. On December 12, 1957, the open single-seater made its first flight in the hands of Bernard Neefs, a Fairey testpilot. After certification, the Nipper entered series production in the Avions Fairey plant at Gosselies. Nippers took part in several airshows, frequently in the capable hands of Bernard Neefs who demonstrated the unexpected aerobatic qualities of the design. Although low-powered, the Nipper proved to be capable of intricate aerobatic manoeuvres, unthinkable for some more prestigious designs.

Unfortunately, the Avions Fairey company was heavily involved in the starting F-104G Starfighter programme for the Belgian Air Force and did not have enough resources to continue Nipper production. After 78 aircraft had been built, the production licence was sold to Cobelavia in 1962. Production rights switched hands again in 1966, when Nipper Aircraft Ltd. was formed at Castle Donnington, GB. Slingsby, the famous British sailplane company, built some 30 aircraft for Nipper Aircraft, after which only plans for amateur builders remained available.

The Nipper cockpit is very cramped, with the wing main spar passing just above the pilots knees. Some elbow room is provided in the wing roots, together with a downward-view window. Cockpit entry is facilitated by a step integrated in the left flap.

Basic Nipper versions

Prototype : open cockpit and low back fuselage. A replica of this prototype is nowadays displayed in the Brussels AELR museum

T.66H Mk.I : initial production version with a 40 hp HEPU (converted VW Beetle) engine

T66S Mk.II : higher-powered version with a 45 hp Stamo (converted VW Beetle) engine

T.66 Mk.III : heavier and more powerful version of the Mk.II. Usually, these aircraft had a fully-cowled engine, whereas the earlier Mk.I and Mk.II had the cylinderheads sticking out of the fuselage.

Several Nippers are known to have been converted with more powerful engines, usually as one-offs, an exception being the successful Barry Smith conversion. During the last years, several Nippers have been reequipped with Jabiru engines (80 hp !), giving the aircraft much better performance and reliability. Unofficially, the Jabiru-Nippers are also known as 'Super-Nippers'.

Technical data Mk.II

Wing span : 6.00 m (6.25m with tiptanks)

Length : 4.56 m

Height : 4.56 m

Empty weight : 210 kg

Maximum weight : 330 kg

Cruise speed : 145 km/h

Maximum speed : 160 km/h

Range : 400 km (720 km with tiptanks)