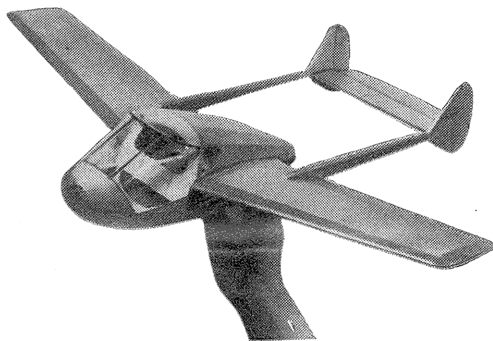


SIPA 200 Mini Jet



by Brian Lewis

LOOKING rather like a shrunk-down "Vampire" the Sipa 200 "Minijet", with its span of a mere 23 ft. 9 in., is the world's smallest jet-plane. The design is the work of a young French engineer, Yves Gardan, whose name first achieved prominence with the Sipa 90 in 1946, and who later produced the popular "Minicab". The 200 was built at Suresnes, and made its maiden flight at Villacoublay on January 14th, 1952, in the hands of test pilot Roger Launay.

The initial flight nearly ended in disaster, for, after a perfect take-off and smooth climb-away, severe vibration and control flutter commenced, and only the air-frame's great strength and the skill of the pilot avoided what might have been a nasty accident. Some months later, after various recalculations and modifications, the machine reappeared with strengthened tail booms, a re-designed cockpit cover, and mass-balanced control surfaces.

Construction commences by pinning down the crutch over the plan, and pinning to this the hatch sides. Lower halves of formers (except F7) are then cemented in place, followed by the lower keel. F7 (made from two cross-grained laminations) is fitted after removal from plan, together with the asbestos tube. Top former halves and top keel are now added, followed by the $\frac{1}{4}$ in. square motor mount, well cemented, and the stringers. Fit $\frac{1}{32}$ in. sheet over F1 and F1A, and add $\frac{1}{16}$ in. filling between stringers where shown. Carve noseblock, sanding to finished shape after cementing, to F1, and separate hatch by cutting through lower keel and stringers. Wire hooks and a rubber band retain the hatch in place.

Make a tracing of the wing and construct one half at a time, reversing tracing for second half. Leave spars slightly overlength until fitting. Cement W1s to fuselage sides, carefully checking angles, and fit wings at angles given by F4, which should produce 1 in. dihedral under each tip. Add W1 cap strips, t.e. filler, $\frac{1}{8}$ x $\frac{1}{4}$ lower intake outline, and $\frac{1}{16}$ strips on underside.

Booms are built as boxes, using $\frac{3}{16}$ x $\frac{1}{8}$ top and bottom and $\frac{3}{32}$ sides, and sanded to section shown. The tailplane, of medium sheet, fits in slots cut in the booms, and the soft sheet fins are cemented to the boom tops. It is best to pin the assembly together to check line-up, applying 2-3 coats of dope or filler to tail and booms before finally cementing. Cover cabin with thin celluloid; wings and fuselage are lightweight tissue-covered and given two coats of thin dope, after which the booms may be cemented to the wing and any colour trim applied.

Balance the completed model where shown, and trim for glide by bending the elevator up or down. A little wingtip washout is helpful but not essential. Power-trim on half charges. The hatch should be replaced after loading and the wick ignited as shown on the plan.