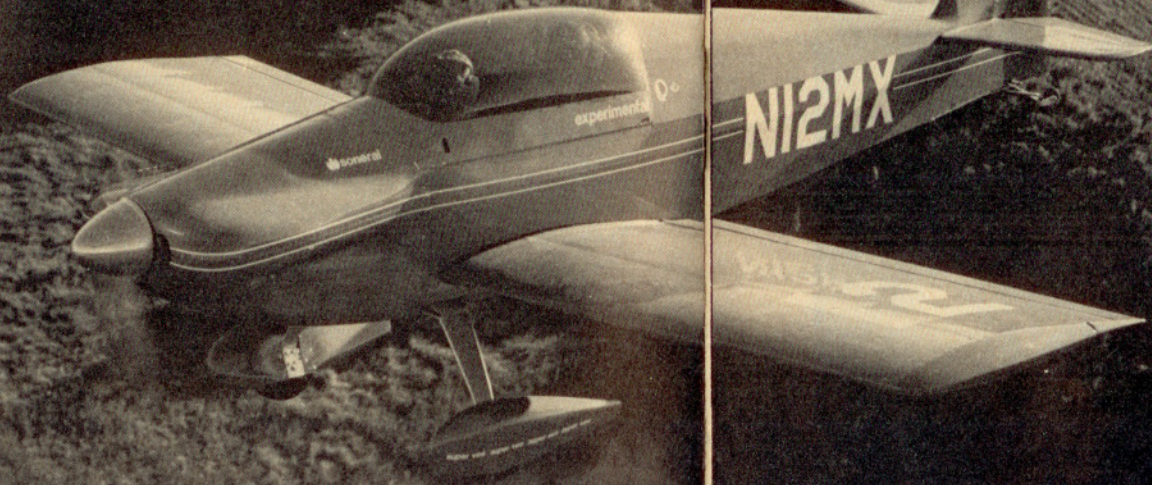




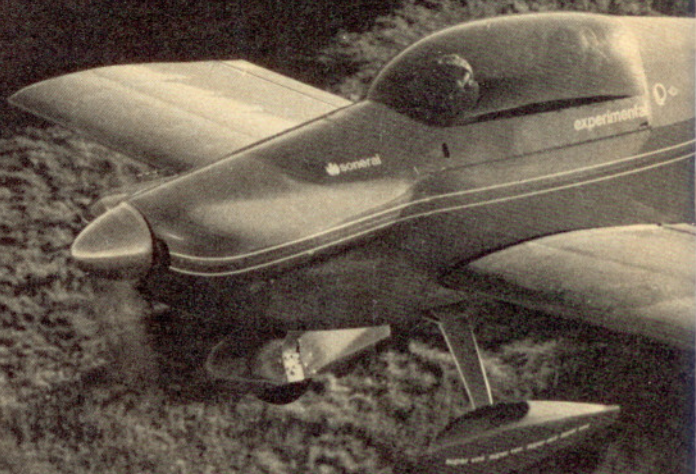
**KIT
AIRCRAFT
PROFILE**



THE SONERAI

Another Monnett innovation—low-wing sportiness.

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That distinctive green color that brightens all of John Monnett's aircraft is not available to builders of Sonerai and Monerai kits. The paint is mixed specially for the designer and is not offered in the Monnett catalogue. Nor does he have for sale propellers, radios or fabric. But almost all other major items and materials needed to build one of his sleek sportplanes can be obtained from his company.

Monnett, who operates at DuPage County (Illinois) Airport, near Chicago, introduced his first homebuilt design, Sonerai 1, 10 years ago. It too was green. A mid-wing single-placer, it was meant for Formula V racing. But with its aerobatic capabilities and its economy of operation (three-gallon-per-hour fuel consumption), it grew more in popularity as a sportplane.

Monnett's line of aircraft grew also. In 1974, he brought out the Sonerai 2, a two-place, mid-wing aircraft, and recently he added the Monerai sailplane to his fleet of designs. Monnett is now working on a power pod for the sailplane, and builders soon will be able to fly the Monerai as a powered sailplane. Those who already have built, or are in the process of building, a Monerai will be able to add the power pod to their aircraft for about \$1,000.

The latest introduction is the Sonerai 2L, a low-wing version of the Sonerai 2. The design is so adaptable that the kit for both model 2s is the same—only the placement of the wing is different. Owners who have

built a mid-wing Sonerai even can lower the wing, according to the new plans.

Monnett thinks that the new low-wing aircraft will appeal to more people, especially to those who want a sportplane instead of a racer. Indeed, lowering the wing has made the aircraft more stable, he said, and provides better visibility; the mid-wing tends

MONNETT SONERAI 2L

Kit price* \$2,494.50

Construction Metal tubing, fabric, fiberglass
Time to build (est) 750 hr

Specifications

Engine	1700 cc Volkswagen or larger
Wingspan	18 ft 8 in
Length	18 ft 10 in
Height	5 ft 6 in
Wing area	84 sq ft
Seats	2
Empty weight	520 lb
Useful load	430 lb
Gross weight	950 lb
Fuel capacity	10 gal

Performance

Takeoff distance (ground roll)	900 ft
Rate of climb	500 fpm
Maximum speed	173 kt
Cruise speed (75% power at 3,400 rpm)	121 kt
Range at 75% cruise (with 45-min reserve)	212 nm
Fuel consumption	3 gph
Landing distance (ground roll)	600 ft
Stall speed	39 kt

*Engine, paint and fabric not included.

Based on designer's figures.



convenience of towing the aircraft home for storage. With the wings folded, the horizontal stabilizer becomes the widest part of the aircraft—six feet.

Various sizes of Volkswagen engines can be used in the Sonerai 2L. The standards are 1700 cc or 1800 cc. The prototype of the low-winger was flown with a 2180 cc, but Monnett does not recommend that much power. (Specs given here are for the 1700 cc engine.) Bill Schaben, AOPA 497260, Monnett's business manager, said that the designer tends to be conservative about performance figures. Monnett lists 174 knots as maximum speed, with a cruise speed of 132 knots, at 75-percent power at 3,400 rpm. The Sonerai 2L carries 430 pounds of useful load and has a cruise range (75-percent power with a 45-minute reserve) of 212 nm.

Monnett no longer lists engines in his catalogue, but will continue to sell to builders of his designs. The 1700 cc (about 60 hp) is \$1,950; the 1800 cc (about 72 hp), \$1,995. Price for the Sonerai 2 kit, which includes plans, wing package, fuselage, hardware, canopy, spinner, gas tank, landing gear, wheels and brakes, tires, tubes, wheel pants, tailwheel, Cherry rivet kit and motor mount spacers, is \$2,494.50. Plans for the low-wing option are \$15 extra. Individual components also are available, since, as Monnett pointed out, some builders might want merely to buy wing ribs and obtain their own aluminum elsewhere. (It also is a convenience for the builder who botches part of the job.)

The average total cost, said Monnett, has been running about \$5,000.

A builder can count on spending 750 hours building a Sonerai or about one to two years, unless he tackles it as a full-time project. One builder actually finished his Sonerai 2L even before Monnett finished his first one; but Monnett flew his first.

Schaben said they can turn out five Sonerai kits a month and 10 Monerai kits. They are considering expanding, as Monnett has yet another design on the way—the Monex, an all-aluminum, single-place aircraft with a bonded wing that should be easier to build than the other designs.

—MFS

to block forward and downward vision, especially on landing. The lowered wing also causes more float on landing, said Monnett.

With the steel-tube, fabric-covered fuselage, metal wings and fiberglass cowl, a builder can sample a variety of construction methods when he sets out to put together a Sonerai kit.

The all-aluminum wing can be hand-riveted. The fuselage and the tail are constructed with chrome-moly tubing and are covered with fabric and fiberglass. The conventional landing gear is a formed aluminum spring; wheels are 500 x 5".

The folding wings offer the builder the



"Dad" Monnett, father of designer John Jr., and the prototype of the latest Monnett design—the Monex. The bonded-wing, single-place airplane features all-aluminum construction.