

► The New Mooney

Mooney's new, metal-covered Mark 21, introduced to the general aviation industry in mid-December, is being eyed with interest by prospective buyers of single-engine aircraft.

It was unveiled at the annual sales meeting of Mooney Aircraft, Inc., at Kerrville, Tex., and was enthusiastically received by members of the company's sales organization. The sleek, new plane is expected to be on display at Mooney showrooms throughout the country early this year.

Major departure from the fabric-covered plane Mooney has produced in the past is the use of aluminum covering over the entire surface of the 1961 version of the highly regarded Mark 20. The laminar-flow wing of the Mark 21 is all metal and is constructed in one piece, incorporating a single main spar of rugged "Z"-type construction. A new wrap-around technique is used in covering the wing, eliminating any skin laps in a span-wise direction.

The main spar is constructed in one piece and is fitted with high-strength fasteners in order to insure maximum structural integrity. The wing is attached to the fuselage by 34 attaching bolts. All structural members of the wing are treated to prevent corrosion. The spar is given an additional protective coating of zinc-chromate primer.

The four-place Mark 21 is powered by the Lycoming O-360-A1A high-compression engine. This new version of the famous Lycoming power plant contains new-type, taper-bored cylinders; new-type piston, compression and oil-scrapers rings, which the manufacturer claims will give longer engine life. It is rated at 180 h.p. maximum speed,

the same as the engine used in the Mark 20A. Maximum speed at sea level is placed at 190 m.p.h.; maximum cruise, 75% power, 180 m.p.h., and normal cruise, 67% power, 172 m.p.h.

Maximum gross weight of the new plane is the same given the 1960 model—2,450 pounds. Empty weight of the new model is 1,490 pounds, 50 pounds more than the Mark 20A, giving the 1961 version a useful load capacity of 960 pounds, compared to 1,010 pounds for the Mark 20A.

Rate of climb of the 21 is placed at 1,150 f.p.m., and its stall speed at 57 m.p.h. The new plane has a service ceiling of 20,000 feet and a maximum range of 1,130 miles at 12,000 feet.

Mooney has gone to considerable effort to dress up the all-metal cabin structure. The interior styling is by Fred M. Gore and Associates, a Dallas, Tex., industrial-design firm. Fiber glass window frames are painted to harmonize with the decor of the interior fabrics.

The forward section of the fuselage is composed of a truss-type welded steel frame covered with aluminum skin. A stainless-steel fire wall separates the cabin from the engine compartment. Cabin seats are constructed of welded-steel frames. The two front seats recline for greater comfort.

A great deal of planning has gone into the Mark 21's instrument panel. Engine gauges are located on the copilot's side and navigation instruments on the left side. There is room for two radios in the center of the panel. A third radio can be installed on a sub-panel on the far right-hand side.

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Metal-covered Mark 21 makes its bow at dealers' meeting.

All-metal wing gives

Kerrville, Tex., product added structural strength

► Special attention is paid to interior of sleek, Texas-built single-engine plane

