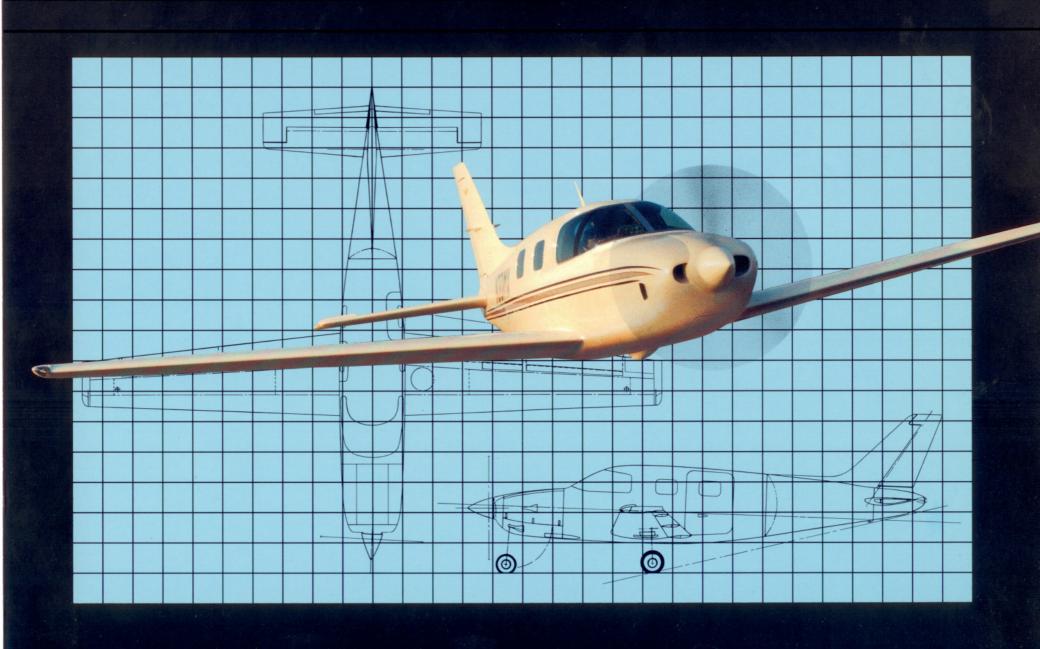


The future of business aircraft is taking shape at Mooney





A unique and beautiful aircraft destined to push aviation technology forward

## **Design Concept**

It is a generally accepted fact that the spiralling costs of owning and operating twin engine business airplanes punctuates the need for a cost effective alternative.

Mooney Aircraft believes the answer to that challenge is a high performance, high altitude, pressurized, six-place airplane powered by a single turbo-charged engine.

## **Design Objectives**

To meet the need, designer Roy Lopresti, Vice-President of engineering defined a tough set of parameters. First, it must have superior flight characteristics with 300 mph top speed and low stall speed. Second, it must be a new airplane — not an improvement of existing designs. Third, it must be a straightforward

design that will permit the average competent pilot to operate safely and efficiently. A design that is aesthetically and aerodynamically flawless with a minimum of manufacturing compromises. Fourth, it will be large, a six-place cabin with large aft cabin door, a high visibility windshield and a high technology wing using computer-aided design to optimize laminar flow.

## Results

The first flight of the Mooney 301 took place April 7, 1983. It was an impressive flight. One prominent aviation editor described the 301 as, "a unique airplane with a number of innovations that will push technology forward."

At this writing the 301 is proceeding with flight testing and design objectives appear to be well within reach.

The single engine, turbo-charged, pressurized Mooney 301 which will carry 6 people at cruise speeds in excess of 270 mph and will add a new dimension to business aviation.

And added to the Mooney line, the 301 will expand Mooney's market and competitive muscle in its quest for dominance in high performance single engine retractable business aircraft.



**Engine** 360 horsepower Lycoming IO540 variant. It is turbo charged, intercooled and has pressurized magnetos. The IO540 is a time-tested and proven power plant. In the 301 @ 75% power it will deliver a cruise of 270 mph and a top speed of 301 mph at 25,000 feet.

**Cabin Configuration** Six place seating includes seats for pilot and co-pilot (or passenger) plus 4 conventional forward facing seats or club seating in the aft cabin. Special attention to ergonomics will provide comfortable seating with an extra measure of leg room.

**Wing** Computer designed air foil section with high aspect ratio and natural laminar flow permits absolute minimum drag under cruise conditions.



**Roll Control** Spoilers in the wing, augmented by short-span ailerons provide excellent roll authority and superior low-speed control responsiveness.



**True Fowler Flaps** Span 9/10ths of wings trailing edge. This permits a small high speed wing in the cruise regime and provides a large wing area for short take-off and landing requirements. Flaps are worm-screw driven and mechanically synchronized.

**Windshield** Precisely molded structural windshield is cut to fit flush with outside fuselage skin. Large, wrap-around design with no corner posts provides unrestricted visibility. Side to side and over the nose visibility is excellent and so important in a see and be seen environment.

**Cabin Pressurization** 5.0 psi provides passengers with a comfortable 9000 ft cabin altitude at flight level 250.

**Cabin Cross Section** From nose to tail section is one smooth curve with no abrupt breaks. Flush riveting and butt joints between skins provide aerodynamic efficiency and esthetically pleasing contours with absolute minimum drag.

**FAR PART 23** The 301 is designed to meet all requirements under Federal Aviation Regulations Part 23.





## Mooney 301 Specifications / Performance Data\*

Cabin	6 Place/Pressurized
Top Speed	301 mph/262 kts (484 km)
Cruise Speed, Max Altitude, 75% Power	270 mph/235 kts (435 km)
Fuel Consumption, At Cruise	19.7 gph (74.6 I)
Fuel Capacity	100 gal (379 l)
Range, At Cruise, 45 min reserve	1,134 miles/986 nm (1,825 km)
Engine, Turbocharged	360 hp Lycoming
Max Certified Altitude	25,000 ft (7,620 m)
Rate of Climb	1,400 fpm (7.1 m/sec)
Gross Weight	4,000 lb (1,814 kg)
Useful Load	1,600 lb (726 kg)
Wing Span	37'0" (11.3 m)
Length	29'8" (9.0 m)
Height	9'10" (3.0 m)

\*Preliminary Engineering Estimates — subject to change pending completion of flight test certification

Mooney Aircraft Corporation reserves the right to make changes to specifications, materials, standard equipment and optional equipment offered on its products at any time without incurring any obligations to equip or modify models manufactured prior to or after the effective date of such change.



Contact Your Mooney Dealer See "Introducing the Mooney 301" an intriguing introduction by its designer Roy Lopresti. You will see how and why the 301 is destined to become one of the most exciting single engine aircraft for the future.

For the name of a dealer near you, write or call:

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