# Mooney Ranger.



# Mooney Ranger Buyer's Guide

Compare features. Compare performance.\* The Ranger is faster, more economical, and lands even slower than you may think.

RDINAL SUN- SKYLAN DOWNER	CARDINAL	CHEROK 180	MOONEY RANGER	
mph 143 mph 160 mph	143 mph	141 mph	172 mph	Cruise (75% power)
2 13.2 11.2	14.2	16.4	18.3	Miles per gallon (75% power)
1,020 1,305	995	1,060	1,050	Useful load (lbs.)
mi. 634 mi. 538 mi.	682 mi.	787 mi.	878 mi.	Range (miles, 48 gallons, no reserve, 75% power)**
nph 59 mph 57 mph	53 mph	61 mph	57 mph	Stall speed (gear and flaps down)
ĺ	53 m	61 mph		and flaps down)

\*Comparisons in this brochure are based on manufacturers' information as published in the 1974 FLYING ANNUAL. Naturally, performance may vary with conditions. Consult FAA-approved aircraft flight manuals for complete details.

\*\*Maximum usable fuel: Mooney Ranger, 52 gallons; Cherokee 180, 48 gallons; Cardinal, 61 gallons; Sundowner, 58.8 gallons; Skylane, 84 gallons.

#### Mooney Ranger Performance and Specifications Highlights

-	
Engine	Lycoming
	0-360-A1D
Horsepower	180
Gross weight	2575 lbs. (1168 kg)
Standard empty	
weight	1525 lbs. (692 kg)
Useful load	1050 lbs. (476 kg)
Wing span	35 ft. (10.7 m)
Length	23'2" (7.1 m)
Height	8'4" (2.5 m)
Power loading	14.3 lbs./HP
	(6.5 kg/HP)
Wing loading	15.4 lbs./sq. ft.
	(75.4 kg/sq. m)
Luggage capacity	120 lbs. (54 kg)
Fuel capacity,	
usable	52 gal. (197 l)
Wheel tread	9'¾" (2.8 m)
Wing area	167 sq. ft.
-	(15.5 sq. m)
Landing gear	Retractable
Number of seats	4

Top speed	176 mph/153 k
	(284 km/h)
Cruise speed,	172 mph/149 k
75% power	(277 km/h)
Rate of climb at	860 fpm
sea level	(4.37 m/sec)
Takeoff run, 0 win	d
S/L std. day	815 ft. (248 m)
Landing roll, 0 win	idi
S/L std. day	595 ft. (181 m)
Stall speed (gear a	&
flaps down,	57 mph/49 k
power off)	(92 km/h)
Service ceiling	19,500 ft. (5944 m)
Fuel flow, 75%	9.4 gal./hr.
power	(35.6 l/h)
Range, 75% powe 45 minute reserv	
Optimum cruising	
range, 55%	
power, optimum	n 930 sm/808 nm

Full flight instrumentation, including pictorial gyros and turn coordinator, is standard with the Ranger. Choose from Narco or King avionics packages, clean-room tested and factory-installed for reliability.



Rugged Mooney gear has no fancy hydraulics or oleos to run up shop bills. Positive-action energy-absorbing electric gear retracts in three seconds, extends in two.

Performance figures  $\pm 3\%$ . Since equipment and specifications are subject to change without notice, please contact your Mooney Marketing Center for details.

# Stop dragging your gear

Mooney Ranger has Mooney quality and ruggedness, outspeeds fixed-gear 180-hp planes by over 30 mph. Yet it's priced right next to the gear draggers. And delivers the same economy as simple machines.

The Ranger seats four in a functionally opulent cabin. Posture-contoured seats, with adjustable backs are standard. Load luggage through Mooney's exclusive wrap-around door. Isn't it time you took a demonstration flight in a Mooney Ranger? Your Mooney Marketing Center will show you how you can stop dragging your gear with attractive trade, lease, or finance plans. Gear up and start flying Ranger. You'll like the change—and keep it.



# The retractable that's close to fixed-gear planes in cost and miles ahead in performance.



Gear up and go in the Mooney Ranger without going to the bank. In terms of initial investment and operating cost, the Ranger is more like a fixed-gear aircraft. This is the world's lowest-cost production retractable, one you can have for just a little more than those gear draggers. Just a little more for real performance advantage, over 30 miles per hour additional cruise speed than comparably powered fixed-gear airplanes.

With a ruggedized 180 hp Lycoming engine (2,000 hour recommended TBO), the Ranger cruises at 172 mph, seats four comfortably in a sports car cabin, and has a useful load with standard equipment of over 1,000 pounds.

#### The economy champ

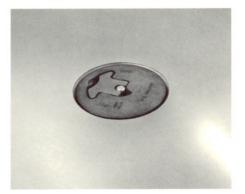
The Ranger delivers over 18 miles per gallon at 75% cruise power, giving you 255 miles more with every 50 gallons of fuel than similarly powered competitive aircraft.

And don't let the Mooney's retractable gear scare you. It's a mechanical dream so rugged and simple that Mooney owners report their maintenance expenses are on a par with some fixed-gear airplanes. That's because there are no fancy hydraulics or oleos to run up shop bills. Just a simple, energy-absorbing, positive-action electric gear that retracts in three seconds and extends in two with the flip of a switch. A weight sensor helps prevent premature retraction, and a throttle-activated warning horn reminds a forgetful pilot in no uncertain terms to extend the gear for landing.

# Mooney performance

The Ranger's a Mooney all the way. It cleans up fast for good climb. It has a solid feel in cruise, more like singles costing twice as much than the fixed-gear aircraft priced close to the Ranger.

The Ranger's clean, laminar-flow wing with generous use of flush-riveting slices through the air. Aerodynamically sealed ailerons, rudder, and elevators reduce drag. And push-pull control rods (Cherokee 180, Cardinal, Sundowner, and Skylane still use cables) provide a rugged, positive feel.



Integral fuel tanks with maximum usable fuel of 52 gallons provide cruise range over 900 miles. Letdown and landing are just as pleasing as cruise. Widespan flaps, almost two-thirds of the wing span, and positive-response controls help keep you in command of every landing. The Ranger's stall speed with gear and flaps down of 57 mph at full gross is remarkably lower than comparably-powered fixed-gear airplanes.

#### Mooney quality

Just because the Ranger's priced like a fixed-gear airplane doesn't mean that corners have been cut. Not by any means. The Ranger has Mooney quality and attention to detail throughout. Zinc chromate corrosion proofing is standard. The interior is finished with the dedication of a furniture craftsman. And the Ranger has all the ruggedness that is Mooney, including a continuous-spar wing that is more than twice as strong as the FAA requires, and energy-absorbing roll bar cabin.

#### Positive Control: A Mooney exclusive

The Mooney Ranger is available with PC, Mooney's Positive Control stability augmentation system that's sure, smooth, and has the extra reliability of both electric and pneumatic operation. PC's "brains" are integrated with the pictorial turn coordinator, which operates electrically. (Backup in the event of electric failure is provided by pneumatic operation.)

PC keeps wings level with smooth, positive pneumatic servos, usually found in only the most expensive automatic flight systems. You can "fine tune" roll attitude with an integral roll trim adjustment on the turn coordinator.

# Standard Equipment

#### Instruments

Airspeed indicator Sensitive altimeter Ammeter Compass Oil pressure gauge Fuel pressure gauge **Recording tachometer** Manifold pressure gauge Hi-lo vacuum indicator lights Oil temperature gauge **Directional** gyro Pictorial artificial horizon Rate of climb indicator Turn coordinator Eight-day clock OAT gauge Stall warning indicator Internally illuminated placards Automatic brightness control for panel lights Two overhead panel flood lights

# Controls

Engine control quadrant with throttle, prop, mixture controls and friction lock Electrically operated retractable landing gear Electrically operated flaps with illuminated indicator

Parking brakes

**Dual flight controls** 

Windshield defrost system Push-pull rod actuated flight control

system

Elevator trim wheel w/illuminated indicator

Removable co-pilot rudder pedals Direct nosewheel steering Disc brakes—toe operated

Illuminated rocker switches

#### Power Plant

Dual magneto ignition Delayed timing starting system Electric starter Shielded ignition harness Oil cooler radiator w/180° thermostat Turn-push starter switch Dry-type paper air filter Dual crossover exhaust system Constant speed propeller Dynafocal engine mounts Dry-vacuum pump w/regulator Full flow oil filter Quick oil drain

# Electrical System

35 ampere-hour battery, 12V 60-amp alternator Voltage regulator w/overvoltage relay and warning light Protective pop-out circuit breakers Annunciator panel with test switch Navigation lights Landing/taxi lights Rotating beacon

# Fuel System

Two jet-type integral sealed wing tanks Engine-driven fuel pump Electric-driven auxiliary fuel pump Fuel selector valve w/inside drain control Two flush wing-tank quick drains

Two electric fuel quantity indicators

See Avionics Folder for complete information on electronics and automatic flight systems available in your new Mooney.

# **Other Features**

Upholstery: long-wearing, hard-finish fabric w/Naugahyde trim Ignition, cabin and baggage door locks Cabin heater w/adjustable outlets and illuminated control Seven cabin fresh-air vents Two pockets back of front seats Hat rack shelf Wing jack points External tie downs (3) Tow bar Sun visors-pair, tinted Individual reclining removable rear seats Ash trays-4, front and rear Arm rests-front and rear Tubular steel, welded fuselage cage Zinc chromate, anti-corrosion treatment Padded instrument glare shield Cabin and baggage door light Color: Base white with choice of eight accent and trim colors

# Optional Equipment At Extra Cost

EGT gauge Heated pitot Alternate static air source Auxiliary power plug ELT beacon, 5-year in-service lithium battery Convenience group: coat hook, assist strap, cigar lighter, and access step Curtains **Dual brakes** Headrests, 2 front Headrests, 2 rear Polished spinner Mooney stability augmentation system (PC) with aileron trim (2 axes) Tinted windows Plex-ring instrument lighting w/rheostat control and dual back up circuits Strobe lights Inertia reel shoulder harnesses