

# SHOPPING MAULE

*The new/old Maule M-5-180C:  
at \$29,995, it's a STOL.*

BY MARK TWOMBLY

Maule Aircraft Corporation sold 37 airplanes in 1983. This year, the expectation around the Maule factory in Moultrie, Georgia, is that 70 to 75 new airplanes may be delivered to customers. Why the turnaround, especially when practically every other general aviation aircraft manufacturer is suffering through the leanest year since the end of World War II? Maule Aircraft Corporation is using the oldest, most reliable merchandising gimmick known: Maule is having a sale.

Early in 1984, Maule announced a price cut on the M-5-180C. Twenty M-5s were to be sold for \$29,995 each—\$12,087 less than the old price for a similarly equipped M-5. The object of the sale, according to Maule, was to “lower our inventory of M-5 parts.”

It was as close as aviation gets to a January white sale, and although customers weren't crowding around the front door before the start of business each day, the phone began to ring. The callers were ready to talk options and place orders.

An initial production run of 20 M-5s was authorized before the sale began, but those quickly sold. Ten more were cleared for production, but those also sold. Now, Maule is committed to building an additional 30 M-5s, for a total of 60 through early 1985. Not bad for an airplane that was withdrawn from production in 1981.

The M-5 Lunar Rocket was introduced in 1973 as the successor to the Maule M-4 Strata Rocket, an improved version of the original Maule Bee Dee M-4. The M-4 and M-5 shared the same basic welded steel tube, fabric-covered fuselage and aluminum-skinned wings, but the M-5 was given a new empennage with larger stabiliz-

ers, rudder and elevator, and a more pronounced dorsal fin. The flap area also was increased.

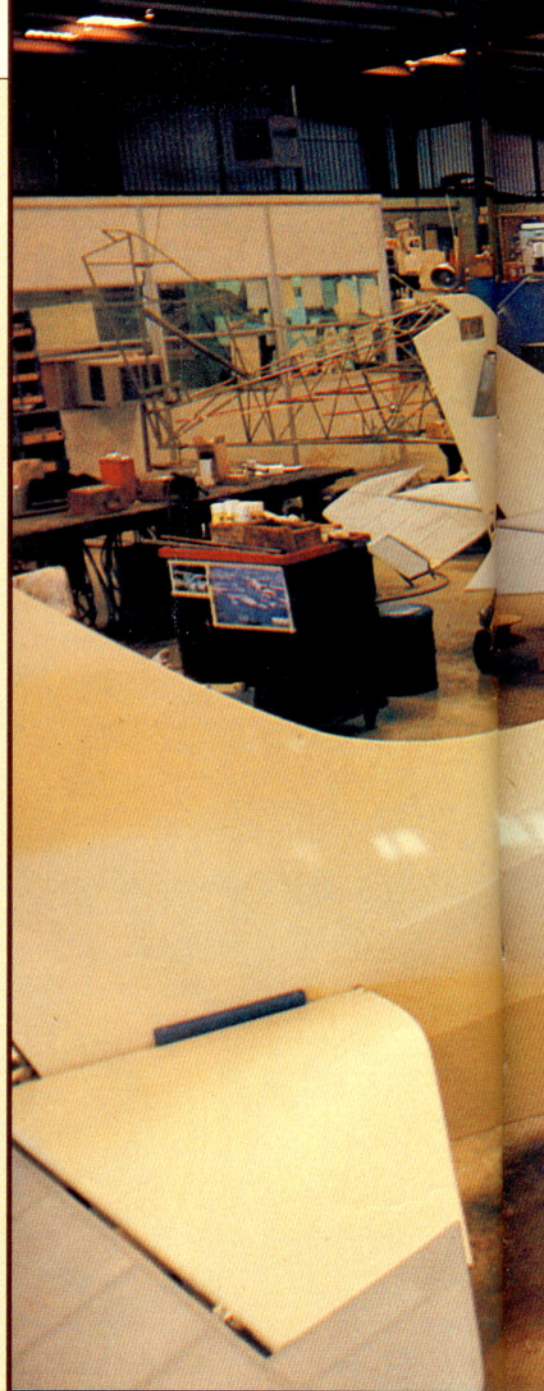
A variety of engines were certificated on the M-5, including the 180-hp Lycoming O-360 and 200-hp fuel-injected IO-360, the 235-hp Lycoming O-540 and fuel-injected IO-540, and the turbocharged 210 Continental.

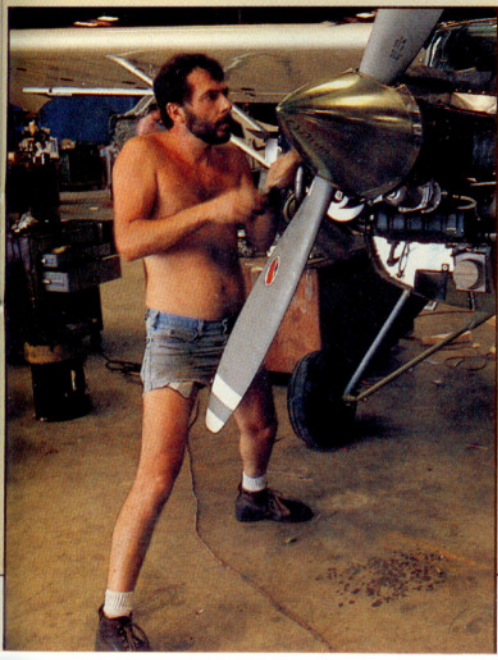
The M-5 was Maule's main production model from 1973 through 1981, when the M-6 was certificated. Like the M-5, the M-6 had a longer wingspan (at the urging of floatplane pilots) and larger four-position flaps. The fourth position is a negative flap setting. The flaps extend seven degrees above the trailing edge of the wing, which increases cruise speeds three to six knots at altitude by reducing drag, according to Maule. Maximum gross weight was increased to 2,500 pounds. With the appearance of the M-6, the M-5 was discontinued, and none were built after 1981.

In November 1983, Maule received type certification of yet another variant of the M-4, The M-7. It has slightly larger ailerons and flaps than the M-6, squared-off wing tips and a larger fuselage cross-section in the aft cabin area to accommodate a third bench seat. The new wing tips enabled Maule to fit larger auxiliary fuel tanks on the M-7. Maximum fuel capacity with the optional outboard tanks is 71 gallons.

Maule considers all of its models STOL aircraft. The short takeoff runs, landing rolls and slow approach and stall speeds are achieved with the modified USA airfoil used on all models, large flaps and plenty of power.

Dan L. Spader, Maule's sales manager and chief test pilot, is fond of demonstrating the Maule's agility—es-





*Last year, production slowed to a trickle, the work weeks were shortened, and people were furloughed. Today, there are back orders, the week is 40 hours long again, and Maule's extended family is back at work.*



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pecially the M-7—by performing short-field takeoffs and landings on the Maule ramp at Spence Field in Moultrie. He lowers the flaps one notch to 20 degrees, holds the brakes while adding power, then begins the takeoff roll. When the airplane breaks ground in about 200 feet or less, Spader immediately extends the flaps to full down—50 degrees—and climbs out at a steep angle. When the best angle of climb speed, 61 knots, is established, the flaps are retracted to 20 degrees. Short-field approaches are conducted with full flaps and full power to maintain 42 knots on short final. The airplane lands firmly, but there is no bounce, and the roll-out is practically non-existent.

The M-5-180's STOL performance is less spectacular because of its shorter

*Like the M-4 before it, and the M-6 and M-7 that followed, the M-5 is a variation on the basic Maule theme.*

wing, smaller flaps and lower horsepower, but takeoff and landing rolls of 200-300 feet are possible, Spader said.

Maule has kept a supply of M-5 parts, mostly ribs, spars and aluminum wing skins, in stock since production ceased three years ago, but the clearance sale was prompted more by the need to increase cash flow than to reduce the inventory of parts. Maule had its best year in 1977, when more than 110 aircraft were sold. The annual production rate has declined since then but remained relatively high until 1983. Then, the production rate on the M-6 and M-7 slowed to a trickle, work weeks were cut back from the normal

*continued*



# THE HOUSE THAT BELFORD BUILT

Resurrecting an out-of-production model and slashing the price 30 percent to generate sales is the kind of maverick decision people have come to expect of Belford David Maule.

By all accounts, Belford Maule, who is better known as "B.D.," is among the most colorful of aircraft industry captains. At age 74, he still roams the Maule factory every day, all day, using a fleet of 20-inch, step-through bicycles as floor transportation. Maule does his best thinking while swaying back and forth in any of an estimated 50 three-quarter-scale wood rocking chairs scattered throughout the three-building complex. In the evenings, he exercises his Irish Setter by escorting him around Spence Field on a Honda.

Maule and his wife June live in a new, rambling house a few hundred yards from the factory on the south shore of Lake Maule, excavated to test their float-equipped aircraft.

Maule designed and built his first airplane when he was about 20, then taught himself to fly in it. He flew the first successful ornithopter and invented the steerable tailwheel. He founded Maule Aircraft in Jackson, Michigan, about 25 years ago, but moved to Moultrie in 1967 to escape winter utility bills

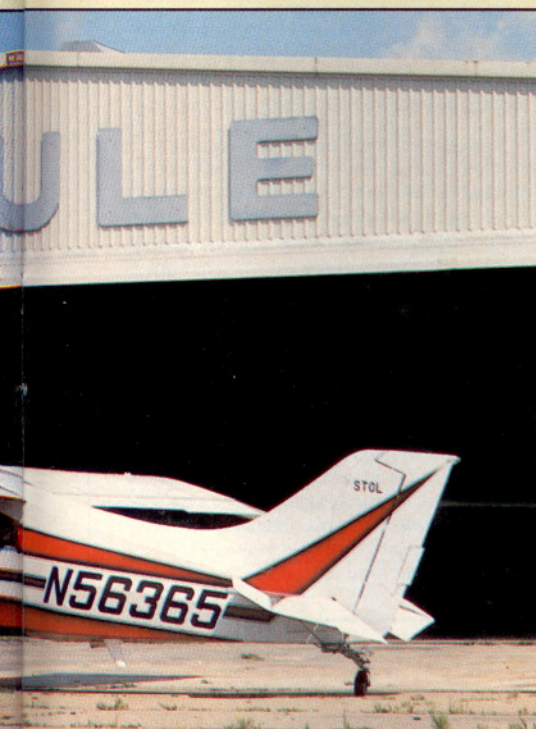
and employee unions. Maule Aircraft's first housing was one of Spence's old military barracks.

Years later, following the theft of \$10,000 in avionics from the factory, the Maules set up housekeeping in the hangar offices and lived there temporarily to protect the inventory.

Maule Aircraft is more than a company; it is an extended family. Seventeen percent of the entire Maule work force has ties to the Maule name. Twelve family members get Maule Aircraft Corporation paychecks, including five children of B.D. and June, two grandchildren and three daughters-in-law. When the company suffers, lots of Maules suffer with it.

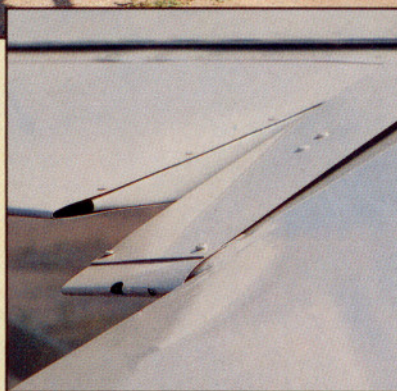
B.D. has kept his employees from suffering, despite the depression in the general aviation industry. The current production run of 60 M-5s has proven his marketing theory correct. Today, the employee roster is back up to full strength, the work weeks are 40 hours long again, and the order backlog is running four to five months.

Maule even claims to be making a little money on the discounted M-5. "Not much," B.D. said. "Just a small margin on each airplane. But, it gives us some cash flow." —MT





The best of all the Maules, including a third seat and negative flaps, will be incorporated on the new MX series.



40 hours, and some employees were furloughed. Even though the economy began to improve in 1983, new airplane orders did not, and sales at Maule and other general aviation manufacturers sunk to record low levels.

Belford D. Maule, founder and president of Maule Aircraft, saw the problem as high interest rates combined with high prices for new aircraft. "Everybody in the industry is charging too much for airplanes," he said. "I thought, 'Let's try giving people something affordable.'" Maule dropped the price of the M-5 to \$29,995. Included at that figure are a Terra nav/com and antenna, electric turn coordinator, rate-of-climb indicator, wing tip strobes, tinted windshield, heated pitot, corrosion proofing, ELT, cloth-covered interior with extra soundproofing and Maule's new custom paint. With optional auxiliary fuel tanks and gyro instruments, the Maule M-5-180C lists for \$31,995.

The 235-hp Lycoming O-540 costs an additional \$4,500, and the IO-540 raises the price of the M-5 \$6,500. Almost every M-5 sale buyer stays with the 180-hp Lycoming, according to Spader. The M-5 also can be equipped with skis or floats, including a set of Edo 2500 Amphibious floats that list for \$46,491, excluding installation.

If the subtle differences between the M-5, M-6 and M-7 haven't confused you, perhaps one more Maule will. A new model is being developed, the

MX-7. It will combine features from all three current production aircraft: the shorter wing of the M-5 but with new fiberglass tips; the four-position flaps from the M-6; and the larger ailerons and auxiliary fuel capacity of the M-7. The M-7's third bench seat will be an option on the MX-7. Gross weight will be 2,500 pounds, for a useful load of about 1,150 pounds.

The MX-7 will borrow another feature from the M-5: price. "We're running specials on the MX, too," Spader said. Both 180-hp and 235-hp versions of the MX-7 will be offered. The MX-7-180 lists for \$35,500, with the same equipment as the M-5-180C. The Lycoming O-540-powered MX is priced at \$40,000, and with the IO-540, \$42,000. The rear jump seat is \$1,000. Meanwhile, the M-5 saleathon will continue. "We're going to stay with it for as long as the traffic will bear," Spader noted. Then, warming to Maule's new-found marketing ethic, Spader delivers the classic salesman's caution: "We can't absorb any more increases in our costs. Our vendors have been real good for the most part, but there have been a couple of increases. The M-5 price is good through the end of the year, but I don't know what will happen after that. \$29,995—that's today's price." □

### Maule M-5-180C

Base price \$29,995

#### AOPA Pilot Operations/ Equipment Category\*:

Sport/Special-purpose \$29,995  
Cross-country \$36,327 to \$40,237  
IFR \$49,958 to \$62,393

#### Specifications

Powerplant	Avco Lycoming O-360-C1E,
	180 hp
Recommended TBO	2,000 hr
Propeller	Hartzell HC-C2YR-1BF/F7666A
Recommended TBO	1,500 hr
Length	22 ft 9 in
Height	6 ft 4 in
Wingspan	30 ft 10 in
Wing area	152 sq ft
Wing loading	15.1 lb/sq ft
Power loading	12.8 lb/hp
Seats	2
Cabin width	3 ft 6.5 in
Empty weight	1,300 lb
Gross weight	2,300 lb
Useful load	1,000 lb
Payload w/full fuel	760 lb
Fuel capacity, std	258 lb (240 lb usable)
	43 gal (40 gal usable)
Fuel capacity,	396 lb (378 lb usable)
w/opt tanks	66 gal (63 gal usable)
Oil capacity, ea engine	8 qt
Baggage capacity	100 lb

#### Performance

Takeoff distance over 50-ft obst	800 ft
Max demonstrated crosswind component	16 kt
Rate of climb, sea level	900 fpm
Max level speed, sea level	133 kt
Max level speed, 4,500 ft	134 kt
Cruise speed/Range w/45-min rsv,	
std fuel (fuel consumption, ea engine)	
@ 75% power, best economy	
5,000 ft	126 kt/505 nm (54 pph/9 gph)
Service ceiling	15,000 ft
Landing distance over 50-ft obst	600 ft

#### Limiting and Recommended Airspeeds

Vx (Best angle of climb)	65 KIAS
Vy (Best rate of climb)	78 KIAS
Va (Design maneuvering)	109 KIAS
Vfe (Max flap extended)	82 KIAS
Vno (Max structural cruising)	126 KIAS
Vne (Never exceed)	156 KIAS
Vso (Stall in landing configuration)	53 KIAS

All specifications are based on manufacturer's calculations. All performance figures are based on standard day, standard atmosphere, at sea level and gross weight, unless otherwise noted.

\*Operations/Equipment Categories reflect this aircraft's maximum potential. See June 1984 *Pilot*, p. 108. The prices reflect the costs for equipment recommended to operate in the listed categories.